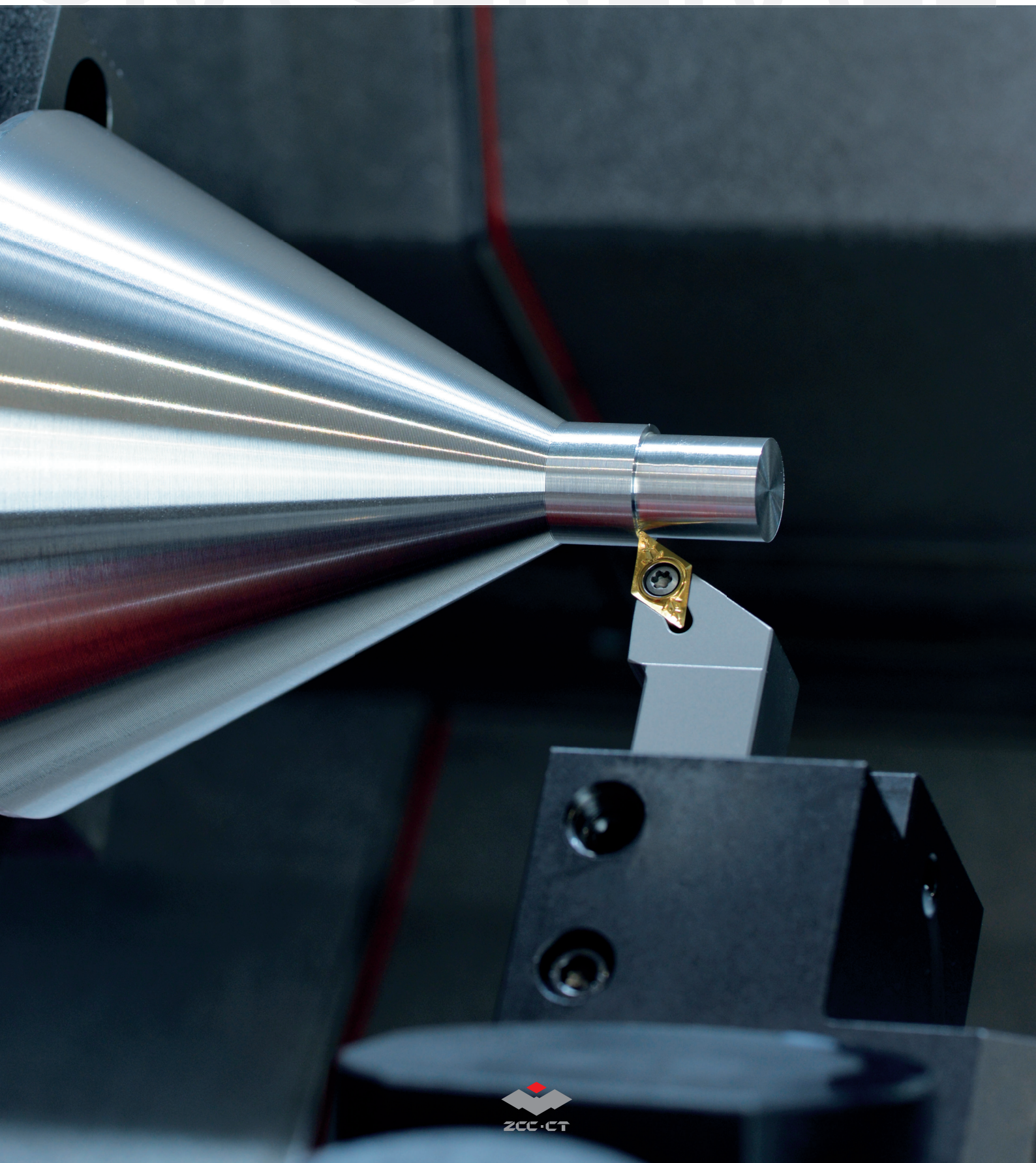


# TORNITURA GENERALE





## Tornitura generale

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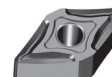
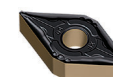


## Inserti in metallo duro e cermet

### Negativo, bilaterale – Finitura

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
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|  |  |  |  |  |  |
| CNEG-NF                                                                           | CNMG-ADF                                                                          | CNMG-DF                                                                           | CNMG-EF                                                                           | CNMG-SF                                                                           | CNMG-XF                                                                            |
| 12                                                                                | 12                                                                                | 09 12                                                                             | 09 12                                                                             | 09 12                                                                             | 12                                                                                 |
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|  |  |  |  |  |  |  |  |
| DNEG-NF                                                                           | DNEG-NGF                                                                          | DNMG-ADF                                                                          | DNMG-DF                                                                           | DNMG-EF                                                                           | DNMG-FM                                                                            | DNMG-SF                                                                             | DNMG-XF                                                                             |
| 15                                                                                | 15                                                                                | 15                                                                                | 11 15                                                                             | 11 15                                                                             | 15                                                                                 | 11 15                                                                               | 11 15                                                                               |
| A66                                                                               | A66                                                                               | A62                                                                               | A62                                                                               | A66                                                                               | A66                                                                                | A62                                                                                 | A63                                                                                 |

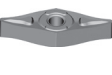
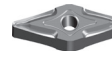
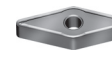
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|  |  |  |  |  |
| SNMG-ADF                                                                          | SNMG-DF                                                                           | SNMG-EF                                                                           | SNMG-SF                                                                           | SNMG-XF                                                                           |
| 12                                                                                | 12                                                                                | 09 12 15                                                                          | 09 12                                                                             | 12                                                                                |
| A71                                                                               | A71                                                                               | A72                                                                               | A71                                                                               | A73                                                                               |

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| TNMG-ADF                                                                           | TNMG-DF                                                                            | TNMG-EF                                                                            | TNMG-FM                                                                            | TNMG-SF                                                                            |
| 16                                                                                 | 16 22                                                                              | 11 16 22                                                                           | 16                                                                                 | 16                                                                                 |
| A87                                                                                | A87                                                                                | A89                                                                                | A90                                                                                | A88                                                                                |

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|  |  |  |  |  |  |  |
| VNEG-NF                                                                             | VNEG-NGF                                                                            | VNMG-ADF                                                                            | VNMG-DF                                                                             | VNMG-EF                                                                             | VNMG-SF                                                                              | VNMG-XF                                                                               |
| 16                                                                                  | 16                                                                                  | 16                                                                                  | 16                                                                                  | 16                                                                                  | 16                                                                                   | 16                                                                                    |
| A100                                                                                | A101                                                                                | A100                                                                                | A100                                                                                | A100                                                                                | A101                                                                                 | A102                                                                                  |

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|  |  |  |  |  |  |  |
| WNEG-NF                                                                             | WNMG-ADF                                                                            | WNMG-DF                                                                             | WNMG-EF                                                                             | WNMG-NF                                                                             | WNMG-SF                                                                              | WNMG-XF                                                                               |
| 08                                                                                  | 08                                                                                  | 06 08                                                                               | 06 08                                                                               | 06                                                                                  | 06 08                                                                                | 06 08                                                                                 |
| A106                                                                                | A105                                                                                | A105                                                                                | A106                                                                                | A106                                                                                | A105                                                                                 | A107                                                                                  |

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### Negativo, bilaterale, raschiante – Finitura

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|  |  |  |  |
| CNMG-WG                                                                             | DNMX-WG                                                                             | TNMX-WG                                                                             | WNMG-WG                                                                             |
| 12                                                                                  | 11 15                                                                               | 16                                                                                  | 08                                                                                  |
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## Inserti in metallo duro e cermet

### Negativo, bilaterale – Asportazione media

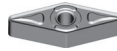
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|    |    |    |    |    |                                                                                      |                                                                                       |                                                                                       |
| CNMG                                                                                | CNMG-DM                                                                             | CNMG-EG                                                                             | CNMG-EM                                                                             | CNMG-NM                                                                             |                                                                                      |                                                                                       |                                                                                       |
| 12 16 19                                                                            | 09 12 16 19                                                                         | 12                                                                                  | 12 16                                                                               | 12                                                                                  | Lunghezza tagl.                                                                      |                                                                                       |                                                                                       |
| A61                                                                                 | A54                                                                                 | A54                                                                                 | A54                                                                                 | A56                                                                                 | Pagina                                                                               |                                                                                       |                                                                                       |
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| CNMG-PM                                                                             | CNMG-TC                                                                             | CNMG-TK                                                                             | CNMG-XM                                                                             | CNMG-ZM                                                                             |                                                                                      |                                                                                       |                                                                                       |
| 09 12 16 19                                                                         | 12 16                                                                               | 12                                                                                  | 12 16 19                                                                            | 12                                                                                  | Lunghezza tagl.                                                                      |                                                                                       |                                                                                       |
| A53                                                                                 | A56                                                                                 | A56                                                                                 | A53                                                                                 | A55                                                                                 | Pagina                                                                               |                                                                                       |                                                                                       |
|    |    |    |    |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| DNMG-DM                                                                             | DNMG-EG                                                                             | DNMG-EM                                                                             | DNMG-NM                                                                             |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| 11 15                                                                               | 15                                                                                  | 11 15                                                                               | 15                                                                                  | Lunghezza tagl.                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A64                                                                                 | A67                                                                                 | A67                                                                                 | A67                                                                                 | Pagina                                                                              |                                                                                      |                                                                                       |                                                                                       |
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| DNMG-PM                                                                             | DNMG-TC                                                                             | DNMG-TK                                                                             | DNMG-XM                                                                             | DNMG-ZM                                                                             |                                                                                      |                                                                                       |                                                                                       |
| 11 15                                                                               | 15                                                                                  | 15                                                                                  | 11 15                                                                               | 15                                                                                  | Lunghezza tagl.                                                                      |                                                                                       |                                                                                       |
| A64                                                                                 | A67                                                                                 | A68                                                                                 | A63                                                                                 | A65                                                                                 | Pagina                                                                               |                                                                                       |                                                                                       |
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| SNMG                                                                                | SNMG-DM                                                                             | SNMG-EG                                                                             | SNMG-EM                                                                             | SNMG-NM                                                                             |                                                                                      |                                                                                       |                                                                                       |
| 12 25                                                                               | 09 12 15 19                                                                         | 12                                                                                  | 12 15                                                                               | 12                                                                                  | Lunghezza tagl.                                                                      |                                                                                       |                                                                                       |
| A83                                                                                 | A75                                                                                 | A75                                                                                 | A76                                                                                 | A77                                                                                 | Pagina                                                                               |                                                                                       |                                                                                       |
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| SNMG-PM                                                                             | SNMG-TC                                                                             | SNMG-TK                                                                             | SNMG-XM                                                                             |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| 09 12 15 19                                                                         | 12 15                                                                               | 12                                                                                  | 12 15 19                                                                            | Lunghezza tagl.                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A74                                                                                 | A76                                                                                 | A76                                                                                 | A73                                                                                 | Pagina                                                                              |                                                                                      |                                                                                       |                                                                                       |
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| TNMG                                                                                | TNMG-DM                                                                             | TNMG-EG                                                                             | TNMG-EM                                                                             | TNMG-PM                                                                             | TNMG-TC                                                                              | TNMG-XM                                                                               | TNMG-ZM                                                                               |
| 16 22 27 33                                                                         | 11 16 22                                                                            | 16                                                                                  | 16 22                                                                               | 11 16 22                                                                            | 16 22                                                                                | 16 22                                                                                 | 16                                                                                    |
| A98                                                                                 | A91                                                                                 | A93                                                                                 | A93                                                                                 | A91                                                                                 | A93                                                                                  | A90                                                                                   | A92                                                                                   |
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**A**

Tornitura

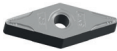
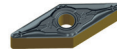
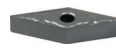
## Inserti in metallo duro e cermet

### Negativo, bilaterale – Asportazione media

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|  |  |  |  |                 |
| <b>VNMG</b>                                                                       | <b>VNMG-DM</b>                                                                    | <b>VNMG-EM</b>                                                                    | <b>VNMG-NM</b>                                                                    |                 |
| 16                                                                                | 16                                                                                | 16                                                                                | 16                                                                                | Lunghezza tagl. |
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**B**

Fresatura

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|  |  |  |  |  |                 |
| <b>VNMG-PM</b>                                                                    | <b>VNMG-SNR</b>                                                                   | <b>VNMG-TC</b>                                                                    | <b>VNMG-XM</b>                                                                    | <b>VNMG-ZM</b>                                                                    |                 |
| 16                                                                                | 16                                                                                | 16                                                                                | 16                                                                                | 16                                                                                | Lunghezza tagl. |
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| <b>WNMG-DM</b>                                                                    | <b>WNMG-EG</b>                                                                    | <b>WNMG-EM</b>                                                                    | <b>WNMG-NM</b>                                                                    |                 |
| 06 08                                                                             | 08                                                                                | 06 08                                                                             | 08                                                                                | Lunghezza tagl. |
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|  |  |  |  |  |                 |
| <b>WNMG-PM</b>                                                                     | <b>WNMG-TC</b>                                                                     | <b>WNMG-TK</b>                                                                     | <b>WNMG-XM</b>                                                                     | <b>WNMG-ZM</b>                                                                     |                 |
| 06 08                                                                              | 08                                                                                 | 08                                                                                 | 06 08                                                                              | 08                                                                                 | Lunghezza tagl. |
| A109                                                                               | A110                                                                               | A110                                                                               | A107                                                                               | A109                                                                               | Pagina          |

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| <b>RNMG</b>                                                                         |  |  |  |  |                 |
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### Negativo, bilaterale – Asportazione media - sgrossatura

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                 |
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|  |  |  |  |  |  |                 |
| <b>CNMA</b>                                                                         | <b>DNMA</b>                                                                         | <b>SNMA</b>                                                                         | <b>SNUN</b>                                                                         | <b>TNMA</b>                                                                         | <b>WNMA</b>                                                                          |                 |
| 12 16 19                                                                            | 15                                                                                  | 12 15 19                                                                            | 12 19                                                                               | 16 22                                                                               | 06 08                                                                                | Lunghezza tagl. |
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**E**

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### Negativo, bilaterale – Sgrossatura

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|  |  |  |  |  |  |                 |
| <b>CNMG-DR</b>                                                                      | <b>CNMG-ER</b>                                                                      | <b>CNMG-SNR</b>                                                                     | <b>DNMG-DR</b>                                                                      | <b>DNMG-ER</b>                                                                      | <b>DNMG-SNR</b>                                                                      |                 |
| 12 16 19 25                                                                         | 12 16 19                                                                            | 12 16 19                                                                            | 15                                                                                  | 15                                                                                  | 15                                                                                   | Lunghezza tagl. |
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**Inserti in metallo duro e cermet**
**Negativo, bilaterale – Sgrossatura**

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|  |  |  |  |  |  |
| <b>SNMG-DR</b>                                                                    | <b>SNMG-ER</b>                                                                    | <b>SNMG-SNR</b>                                                                   | <b>TNMG-DR</b>                                                                    | <b>TNMG-ER</b>                                                                    | <b>TNMG-SNR</b>                                                                   |
| 12 15 19 25                                                                       | 12 15 19                                                                          | 12                                                                                | 16 22 27                                                                          | 16 22                                                                             | 16                                                                                |
| A77                                                                               | A78                                                                               | A78                                                                               | A94                                                                               | A95                                                                               | A92                                                                               |
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| <b>WNMG-DR</b>                                                                    | <b>WNMG-SNR</b>                                                                   |                 |
| 06 08                                                                             | 08                                                                                |                 |
| A111                                                                              | A109                                                                              |                 |
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**Negativo, monolaterale – Sgrossatura**

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
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|  |  |  |  |  |  |
| <b>CNMM</b>                                                                       | <b>CNMM-DR</b>                                                                    | <b>CNMM-ER</b>                                                                    | <b>CNMM-HDR</b>                                                                   | <b>CNMM-HPR</b>                                                                   | <b>CNMM-LR</b>                                                                    |
| 12 19                                                                             | 12 16 19 25                                                                       | 25                                                                                | 12 16 19 25                                                                       | 19 25                                                                             | 12 16 19 25                                                                       |
| A60                                                                               | A58                                                                               | A58                                                                               | A60                                                                               | A60                                                                               | A59                                                                               |
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| <b>DNMM-DR</b>                                                                      | <b>DNMM-ER</b>                                                                      | <b>DNMM-HDR</b>                                                                     | <b>DNMM-LR</b>                                                                      |
| 15                                                                                  | 15                                                                                  | 15                                                                                  | 15                                                                                  |
| A70                                                                                 | A70                                                                                 | A70                                                                                 | A70                                                                                 |
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|  |  |  |  |  |  |
| <b>SNMM</b>                                                                         | <b>SNMM-DR</b>                                                                      | <b>SNMM-ER</b>                                                                      | <b>SNMM-HDR</b>                                                                     | <b>SNMM-HPR</b>                                                                     | <b>SNMM-LR</b>                                                                      |
| 19 25                                                                               | 15 19 25                                                                            | 25                                                                                  | 12 15 19 25                                                                         | 19 25                                                                               | 12 15 19 25                                                                         |
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| <b>TNMM</b>                                                                         | <b>TNMM-DR</b>                                                                      | <b>TNMM-HDR</b>                                                                     | <b>TNMM-LR</b>                                                                      |
| 16 22 27                                                                            | 16 22 27                                                                            | 22 27                                                                               | 16                                                                                  |
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**Forma speciale – Finitura**

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|  |  |  |  |  |  |
| <b>CNMG-RF</b>                                                                      | <b>CNMM-RF</b>                                                                      | <b>CNMM-RH</b>                                                                      | <b>KNUX</b>                                                                         | <b>LNUX-RF</b>                                                                      | <b>LNUX-RH</b>                                                                      |
| 19                                                                                  | 19                                                                                  | 19                                                                                  | 16                                                                                  | 19 30                                                                               | 19 30                                                                               |
| A114                                                                                | A114                                                                                | A114                                                                                | A113                                                                                | A115                                                                                | A115                                                                                |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | Lunghezza tagl.                                                                     |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | Pagina                                                                              |

## Inserti in metallo duro e cermet

### Positivo – Finitura di precisione



**CCGT-SF**

06 09  
A116



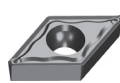
**CCGT-USF**

06 09  
A116



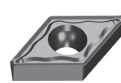
**CPGT-SF**

06 09  
A124



**DCGT-SF**

07 11  
A125



**DPGT-SF**

07 11  
A131

Lunghezza tagl.  
Pagina



**TBGH**

06  
A139



**TCGT-SF**

06 09 11  
A140



**TPGH**

09 11  
A146



**TPGT-SF**

09 11  
A147

Lunghezza tagl.  
Pagina



**VBGT-SF**

11  
A150



**VCGT-SF**

11 16  
A153

Lunghezza tagl.  
Pagina

### Positivo – Finitura



**CCMT-AHF**

06 09 12  
A117



**CCMT-EF**

06 09 12  
A118



**CCMT-HF**

06 09 12  
A117



**CCMT-XF**

06 09  
A118



**CPMT-HF**

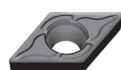
06  
A124

Lunghezza tagl.  
Pagina



**DCMT-AHF**

07 11  
A125



**DCMT-EF**

07 11  
A126



**DCMT-HF**

07 11  
A126



**DCMT-XF**

07 11  
A126



**SCMT-AHF**

09  
A134



**SCMT-EF**

09  
A134



**SCMT-HF**

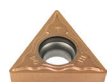
09  
A135



**SCMT-XF**

09  
A134

Lunghezza tagl.  
Pagina



**TCMT-AHF**

11 16  
A141



**TCMT-EF**

09 11 16  
A142



**TCMT-HF**

09 11 16  
A141



**TCMT-XF**

09 11 16  
A141

Lunghezza tagl.  
Pagina



**VBET-NF**

16  
A149



**VBET-NGF**

16  
A151



**VBMT-AHF**

16  
A148



**VBMT-EF**

11 16  
A148



**VBMT-HF**

11  
A149



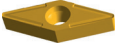
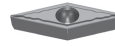
**VBMT-XF**

11 16  
A148

Lunghezza tagl.  
Pagina

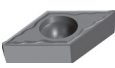
## Inserti in metallo duro e cermet

### Positivo – Finitura

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------|
|  |  |  |  |  |                 |
| <b>VCMT-EM</b>                                                                    | <b>VCMT-HM</b>                                                                    | <b>VCMT-NF</b>                                                                    | <b>VCMT-EF</b>                                                                    | <b>VCMT-XF</b>                                                                    |                 |
| 13                                                                                | 11                                                                                | 16                                                                                | 16                                                                                | 11 16                                                                             | Lunghezza tagl. |
| A153                                                                              | A153                                                                              | A153                                                                              | A156                                                                              | A156                                                                              | Pagina          |

### Positivo – Asportazione media

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| <b>CCMT-EM</b>                                                                    | <b>CCMT-HM</b>                                                                    | <b>CCMT-XM</b>                                                                    | <b>CCMW</b>                                                                       | <b>CPGW</b>                                                                       | <b>CPMT-HM</b>                                                                    |
| 06 09 12                                                                          | 06 09 12                                                                          | 09 12                                                                             | 09 12                                                                             | 06                                                                                | 09                                                                                |
| A119                                                                              | A120                                                                              | A119                                                                              | A121                                                                              | A124                                                                              | A124                                                                              |
|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lunghezza tagl.                                                                   |
|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Pagina                                                                            |

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--|-----------------|
|  |  |  |  |  |                 |
| <b>DCMT-EM</b>                                                                    | <b>DCMT-HM</b>                                                                    | <b>DCMT-XM</b>                                                                    | <b>DCMW</b>                                                                       |  |                 |
| 07 11                                                                             | 07 11                                                                             | 11                                                                                | 11                                                                                |  |                 |
| A127                                                                              | A128                                                                              | A127                                                                              | A129                                                                              |  |                 |
|                                                                                   |                                                                                   |                                                                                   |                                                                                   |  | Lunghezza tagl. |
|                                                                                   |                                                                                   |                                                                                   |                                                                                   |  | Pagina          |

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|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|-----------------|
|  |  |  |  |  |                 |
| <b>SCMT-EM</b>                                                                      | <b>SCMT-HM</b>                                                                      | <b>SCMT-XM</b>                                                                      | <b>SPMW</b>                                                                         |  |                 |
| 09 12                                                                               | 09 12                                                                               | 09 12                                                                               | 09 12                                                                               |  |                 |
| A134                                                                                | A135                                                                                | A135                                                                                | A138                                                                                |  |                 |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |  | Lunghezza tagl. |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |  | Pagina          |

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|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|
|  |  |  |  |  |                 |
| <b>TCMT</b>                                                                         | <b>TCMT-EM</b>                                                                      | <b>TCMT-HM</b>                                                                      | <b>TCMW</b>                                                                         | <b>TCMT-XM</b>                                                                      |                 |
| 22                                                                                  | 09 11 16                                                                            | 09 11 16                                                                            | 16                                                                                  | 16                                                                                  |                 |
| A144                                                                                | A142                                                                                | A143                                                                                | A143                                                                                | A142                                                                                |                 |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | Lunghezza tagl. |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | Pagina          |

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|
|  |  |  |  |  |                 |
| <b>VBMT-EM</b>                                                                      | <b>VBMT-HM</b>                                                                      | <b>VBMT-XM</b>                                                                      | <b>VCMT-EM</b>                                                                      | <b>VCMT-XM</b>                                                                      |                 |
| 11 16                                                                               | 16                                                                                  | 16                                                                                  | 16                                                                                  | 16                                                                                  |                 |
| A151                                                                                | A151                                                                                | A151                                                                                | A156                                                                                | A156                                                                                |                 |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | Lunghezza tagl. |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | Pagina          |

### Positivo – Sgrossatura

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------|
|  |  |  |  |  |  |  |  |                 |
| <b>CCMT-HR</b>                                                                      | <b>CCMT-TC</b>                                                                      | <b>DCMT-HR</b>                                                                      | <b>RCMT-RCGT</b>                                                                    | <b>RCMX</b>                                                                         | <b>RCMX-PV</b>                                                                      | <b>SCMT-HR</b>                                                                        | <b>TCMT-HR</b>                                                                        |                 |
| 06 09 12                                                                            | 06 09 12                                                                            | 11                                                                                  | 08 10 12 16 20 25                                                                   | 08 10 12 16 20 25 32                                                                | 32                                                                                  | 09 12                                                                                 | 09 11 16 22                                                                           |                 |
| A121                                                                                | A121                                                                                | A129                                                                                | A132                                                                                | A133                                                                                | A133                                                                                | A136                                                                                  | A143                                                                                  |                 |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       | Lunghezza tagl. |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       | Pagina          |



## Inserti in metallo duro e cermet

### Positivo – Sgrossatura



**VBMT-HR**



**VBMT-SNR**

|      |      |                 |
|------|------|-----------------|
| 16   | 16   | Lunghezza tagl. |
| A152 | A152 | Pagina          |

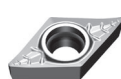
### Positivo – Lavorazione alluminio



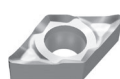
**CCGX-LC**



**CCGX-LH**



**DCGX-LC**



**DCGX-LH**



**RCGX-LH**

|          |          |       |       |       |                 |
|----------|----------|-------|-------|-------|-----------------|
| 06 09 12 | 06 09 12 | 07 11 | 07 11 | 08 12 | Lunghezza tagl. |
| A122     | A122     | A129  | A130  | A132  | Pagina          |



**SCGX-LC**



**SCGX-LH**



**TCGX-LC**



**TCGX-LH**



**VCGX-LC**



**VCGX-LH**

|       |       |          |          |          |          |                 |
|-------|-------|----------|----------|----------|----------|-----------------|
| 09 12 | 09 12 | 09 11 16 | 09 11 16 | 11 16 22 | 11 16 22 | Lunghezza tagl. |
| A136  | A137  | A145     | A145     | A154     | A155     | Pagina          |

## Inserti in PCBN & PCD

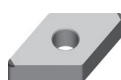
### Negativo



**CNGA-2**



**CNGA-2W**



**DNAGA-2**



**SNGA-4**



**TNGA-3**

|      |      |      |      |      |                 |
|------|------|------|------|------|-----------------|
| 12   | 12   | 15   | 12   | 16   | Lunghezza tagl. |
| A160 | A160 | A161 | A162 | A163 | Pagina          |



**VNGA-2**



**WNGA-3**



**ZNEX**

|      |      |      |                 |
|------|------|------|-----------------|
| 16   | 08   | 04   | Lunghezza tagl. |
| A164 | A165 | A166 | Pagina          |



**CNGN**



**CNGN-M**



**RNGN**



**SNGN**



**SNGN-M**



**WNGN**

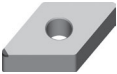


**WNGN-M**

|       |      |       |      |      |      |      |                 |
|-------|------|-------|------|------|------|------|-----------------|
| 09 12 | 12   | 09 12 | 12   | 12   | 08   | 08   | Lunghezza tagl. |
| A173  | A173 | A174  | A175 | A175 | A176 | A176 | Pagina          |

## Inserti in PCBN &amp; PCD

## Negativo

|                                                                                   |                                                                                   |                                                                                   |  |                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--|-----------------|
|  |  |  |  |                 |
| <b>CNGA</b>                                                                       | <b>DNGA</b>                                                                       | <b>VNGA</b>                                                                       |  |                 |
| 12                                                                                | 15                                                                                | 16                                                                                |  | Lunghezza tagl. |
| A177                                                                              | A178                                                                              | A179                                                                              |  | Pagina          |

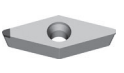
## Positivo

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------|
|  |  |  |  |  |                 |
| <b>CCGW-2</b>                                                                     | <b>DCGW-2</b>                                                                     | <b>TCGW-3</b>                                                                     | <b>VBGW-2</b>                                                                     | <b>VCGW-2</b>                                                                     |                 |
| 06 09 12                                                                          | 07 11                                                                             | 11 16                                                                             | 16                                                                                | 11 16                                                                             | Lunghezza tagl. |
| A167                                                                              | A169                                                                              | A170                                                                              | A171                                                                              | A172                                                                              | Pagina          |

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|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------|
|  |  |  |  |  |                 |
| <b>CCGT</b>                                                                       | <b>CCGT-1MED</b>                                                                  | <b>CCGT-L</b>                                                                     | <b>CCGW</b>                                                                       | <b>CCGW-L</b>                                                                     |                 |
| 06 09 12                                                                          | 06 09                                                                             | 09 12                                                                             | 06 09 12                                                                          | 06 09 12                                                                          | Lunghezza tagl. |
| A180                                                                              | A180                                                                              | A181                                                                              | A182                                                                              | A183                                                                              | Pagina          |

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|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|-----------------|
|  |  |  |  |                 |
| <b>DCGT</b>                                                                         | <b>DCGT-1MED</b>                                                                    | <b>DCGW</b>                                                                         |  |                 |
| 07 11                                                                               | 07 11                                                                               | 07 11                                                                               |  | Lunghezza tagl. |
| A184                                                                                | A185                                                                                | A186                                                                                |  | Pagina          |

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|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|
|  |  |  |  |  |                 |
| <b>TCGT</b>                                                                         | <b>TCGT-1MED</b>                                                                    | <b>TCGT-L</b>                                                                       | <b>TCGW</b>                                                                         | <b>TCGW-L</b>                                                                       |                 |
| 11 16                                                                               | 11 16                                                                               | 11 16                                                                               | 11 16                                                                               | 11 16                                                                               | Lunghezza tagl. |
| A187                                                                                | A187                                                                                | A188                                                                                | A189                                                                                | A190                                                                                | Pagina          |

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|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------|
|  |  |  |  |  |  |                 |
| <b>VBGT</b>                                                                         | <b>VBGT-1MED</b>                                                                    | <b>VBGW</b>                                                                         | <b>VCGT</b>                                                                         | <b>VCGT-1MED</b>                                                                    | <b>VCGW</b>                                                                          |                 |
| 11 16                                                                               | 16                                                                                  | 11 16                                                                               | 11 16                                                                               | 11 16                                                                               | 11 16 22                                                                             | Lunghezza tagl. |
| A191                                                                                | A191                                                                                | A192                                                                                | A193                                                                                | A194                                                                                | A195                                                                                 | Pagina          |

## Inserti ceramici

## Negativo

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------|
|  |  |  |  |  |  |                 |
| <b>CNGA</b>                                                                         | <b>CNGN</b>                                                                         | <b>CNGX</b>                                                                         | <b>DNGA</b>                                                                         | <b>DNGN</b>                                                                         | <b>DNGX</b>                                                                          |                 |
| 12 16                                                                               | 12 16                                                                               | 12                                                                                  | 15                                                                                  | 15                                                                                  | 15                                                                                   | Lunghezza tagl. |
| A200                                                                                | A201                                                                                | A203                                                                                | A204                                                                                | A205                                                                                | A206                                                                                 | Pagina          |

## Inserti ceramici

### Negativo



**RNGA**

12

A207



**RNGN**

06 09 12 15 19 25

A208



**SNGA**

12

A210



**SNGN**

12 15 19

A211



**SNGX**

12

A213



**TNGA**

16 22

A214



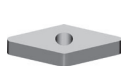
**TNGN**

16 22

A215

Lunghezza tagl.

Pagina



**VNGA**

16

A216



**WNGA**

08

A217

Lunghezza tagl.

Pagina

### Positivo



**RCGX**

06 09 12 19

A218



**RPGN**

12

A219



**RPGX**

09

A220



**TPGN**

11 16

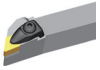
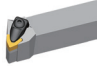
A221

Lunghezza tagl.

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## Portautensili esterni

## Portautensile con bloccaggio doppio

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |  |  |        |
| DCLNR/L                                                                           | DDJNR/L                                                                           | DSBNR/L                                                                           | DTGNR/L                                                                           | DVJNR/L                                                                           | DVVNN                                                                             | DWLNR/L                                                                             |        |
| 95°                                                                               | 93°                                                                               | 75°                                                                               | 90°                                                                               | 93°                                                                               | 72,5°                                                                             | 95°                                                                                 | Angolo |
| A230                                                                              | A231                                                                              | A232                                                                              | A233                                                                              | A235                                                                              | A234                                                                              | A236                                                                                | Pagina |

## Portautensile con bloccaggio a leva

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |  |  |  |        |
| PCBNR/L                                                                           | PCLNR/L                                                                           | PDJNR/L                                                                           | PDNNR/L                                                                           | PSBNR/L                                                                           | PSDNN                                                                             | PSKNR/L                                                                             | PSSNR/L                                                                             |        |
| 75°                                                                               | 95°                                                                               | 93°                                                                               | 63°                                                                               | 75°                                                                               | 45°                                                                               | 75°                                                                                 | 45°                                                                                 | Angolo |
| A237                                                                              | A238                                                                              | A240                                                                              | A241                                                                              | A242                                                                              | A244                                                                              | A245                                                                                | A246                                                                                | Pagina |

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|  |  |  |  |        |
| PTFNR/L                                                                           | PTGNR/L                                                                           | PTTNR/L                                                                           | PWLNR/L                                                                           |        |
| 91°                                                                               | 90°                                                                               | 60°                                                                               | 95°                                                                               | Angolo |
| A247                                                                              | A249                                                                              | A248                                                                              | A251                                                                              | Pagina |

## Portautensile con sistema di bloccaggio a staffa / perno

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |  |  |  |        |
| MCBNR/L                                                                             | MCLNR/L                                                                             | MDJNR/L                                                                             | MDPNN                                                                               | MRDNN                                                                               | MRGNR/L                                                                             | MSBNR/L                                                                               | MSDNN                                                                                 |        |
| 75°                                                                                 | 95°                                                                                 | 93°                                                                                 | 62,5°                                                                               | 45°                                                                                 | 90°                                                                                 | 75°                                                                                   | 45°                                                                                   | Angolo |
| A252                                                                                | A253                                                                                | A254                                                                                | A255                                                                                | A267                                                                                | A268                                                                                | A256                                                                                  | A259                                                                                  | Pagina |

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|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |  |  |  |        |
| MSKNR/L                                                                             | MSRNR/L                                                                             | MTFNR/L                                                                             | MTGNR/L                                                                             | MTJNR/L                                                                             | MTJNR/L-Z                                                                           | MVJNR/L                                                                               | MVVNN                                                                                 |        |
| 75°                                                                                 | 75°                                                                                 | 90°                                                                                 | 90°                                                                                 | 93°                                                                                 | 93°                                                                                 | 93°                                                                                   | 72,5°                                                                                 | Angolo |
| A258                                                                                | A257                                                                                | A263                                                                                | A260                                                                                | A261                                                                                | A262                                                                                | A265                                                                                  | A264                                                                                  | Pagina |

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|-------------------------------------------------------------------------------------|--------|
|  |        |
| MWLNR/L                                                                             |        |
| 95°                                                                                 | Angolo |
| A266                                                                                | Pagina |

A

Tornitura

B

Fresatura

C

Foratura

D

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Indice



## Portautensili esterni

### Portautensile con bloccaggio a vite

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |  |  |  |        |
| <b>SCACR/L</b>                                                                    | <b>SCLCR/L</b>                                                                    | <b>SDACR/L</b>                                                                    | <b>SDJCR/L</b>                                                                    | <b>SDNCN</b>                                                                      | <b>SRDCN</b>                                                                       | <b>SRGCR/L</b>                                                                      | <b>SSBCR/L</b>                                                                      |        |
| 90°                                                                               | 95°                                                                               | 90°                                                                               | 93°                                                                               | 63°                                                                               | 45°                                                                                | 90°                                                                                 | 75°                                                                                 | Angolo |
| A269                                                                              | A270                                                                              | A271                                                                              | A272                                                                              | A273                                                                              | A288                                                                               | A289                                                                                | A279                                                                                | Pagina |

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |  |  |  |        |
| <b>SSDCN</b>                                                                      | <b>SSKCR/L</b>                                                                    | <b>SSSCR/L</b>                                                                    | <b>STACR/L</b>                                                                    | <b>STFCR/L</b>                                                                    | <b>STGCR/L</b>                                                                     | <b>STTCR/L</b>                                                                      | <b>SVABR/L</b>                                                                      |        |
| 45°                                                                               | 75°                                                                               | 45°                                                                               | 90°                                                                               | 90°                                                                               | 90°                                                                                | 60°                                                                                 | 90°                                                                                 | Angolo |
| A280                                                                              | A281                                                                              | A282                                                                              | A283                                                                              | A284                                                                              | A285                                                                               | A286                                                                                | A275                                                                                | Pagina |

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--|--|--|--------|
|  |  |  |  |  |  |  |  |        |
| <b>SVJBR/L</b>                                                                    | <b>SVJCR/L</b>                                                                    | <b>SVVBN</b>                                                                      | <b>SVVCN</b>                                                                      | <b>SWACR/L</b>                                                                    |  |  |  |        |
| 93°                                                                               | 93°                                                                               | 72,5°                                                                             | 72,5°                                                                             | 90°                                                                               |  |  |  | Angolo |
| A274                                                                              | A278                                                                              | A276                                                                              | A277                                                                              | A287                                                                              |  |  |  | Pagina |

### Portautensile con bloccaggio a staffa

|                                                                                     |                                                                                     |  |  |  |  |  |  |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|--|--|--|--|--|--------|
|  |  |  |  |  |  |  |  |        |
| <b>CKJNR/L</b>                                                                      | <b>CKNNR/L</b>                                                                      |  |  |  |  |  |  |        |
| 93°                                                                                 | 63°                                                                                 |  |  |  |  |  |  | Angolo |
| A290                                                                                | A291                                                                                |  |  |  |  |  |  | Pagina |

### Portautensili per inserti ceramici e CBN completo

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |  |  |  |        |
| <b>CCLNR/L</b>                                                                      | <b>CDJNR/L</b>                                                                      | <b>CRDNN</b>                                                                        | <b>CSDNN</b>                                                                        | <b>CSKNR/L</b>                                                                      | <b>CSRNR/L</b>                                                                       | <b>CTJNR/L</b>                                                                        | <b>CTUNR/L</b>                                                                        |        |
| 95°                                                                                 | 93°                                                                                 | 45°                                                                                 | 45°                                                                                 | 75°                                                                                 | 75°                                                                                  | 93°                                                                                   | 93°                                                                                   | Angolo |
| A292                                                                                | A294                                                                                | A298                                                                                | A299                                                                                | A296                                                                                | A297                                                                                 | A293                                                                                  | A295                                                                                  | Pagina |

|                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|--|--|--|--|--------|
|  |  |  |  |  |  |  |  |        |
| <b>JCLNR/L</b>                                                                      | <b>JDJNR/L</b>                                                                      | <b>JSDNN</b>                                                                        |  |  |  |  |  |        |
| 95°                                                                                 | 93°                                                                                 | 45°                                                                                 |  |  |  |  |  | Angolo |
| A300                                                                                | A301                                                                                | A302                                                                                |  |  |  |  |  | Pagina |

## Portautensili esterni

### Fantine mobili

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |  |  |  |        |
| <b>SCACR/L-SC</b>                                                                 | <b>SCLCR/L-SC</b>                                                                 | <b>SDACR/L-SC</b>                                                                 | <b>SDHCR/L-SC</b>                                                                 | <b>SDJCR/L-SC</b>                                                                 | <b>SDNCN-SC</b>                                                                   | <b>SVACR/L-SC</b>                                                                   | <b>SVJCR/L-SC</b>                                                                   |        |
| 90°                                                                               | 95°                                                                               | 90°                                                                               | 107,5°                                                                            | 93°                                                                               | 63°                                                                               | 90°                                                                                 | 93°                                                                                 | Angolo |
| A306                                                                              | A307                                                                              | A308                                                                              | A309                                                                              | A310                                                                              | A311                                                                              | A312                                                                                | A313                                                                                | Pagina |

## Tecnologia ferroviaria

|                                                                                   |                                                                                   |                                                                                   |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|
|  |  |  |        |
| <b>RW-PCLNR/L</b>                                                                 | <b>RW-PLANR/L</b>                                                                 | <b>RW-PLFNR/L</b>                                                                 |        |
| 90°                                                                               | 90°                                                                               | 90°                                                                               | Angolo |
| A318                                                                              | A316                                                                              | A317                                                                              | Pagina |

## Barre alesatrici

### Barre alesatrici in acciaio con bloccaggio a leva

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |        |
| <b>A***-PCLNR/L</b>                                                                 | <b>A***-PDSNR/L</b>                                                                 | <b>A***-PDUNR/L</b>                                                                 | <b>A***-PSKNR/L</b>                                                                 | <b>A***-PTFNR/L</b>                                                                 |        |
| 95°                                                                                 | 45°                                                                                 | 93°                                                                                 | 75°                                                                                 | 90°                                                                                 | Angolo |
| A324                                                                                | A326                                                                                | A327                                                                                | A329                                                                                | A330                                                                                | Pagina |

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |  |        |
| <b>S***-PCLNR/L</b>                                                                 | <b>S***-PDSNR/L</b>                                                                 | <b>S***-PDUNR/L</b>                                                                 | <b>S***-PSKNR/L</b>                                                                 | <b>S***-PTFNR/L</b>                                                                 | <b>S***-PWLNR/L</b>                                                                 |        |
| 95°                                                                                 | 45°                                                                                 | 93°                                                                                 | 75°                                                                                 | 90°                                                                                 | 95°                                                                                 | Angolo |
| A324                                                                                | A326                                                                                | A327                                                                                | A329                                                                                | A330                                                                                | A332                                                                                | Pagina |

### Barre alesatrici in acciaio con bloccaggio a vite

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  |        |
| <b>A***-SCLCR/L</b>                                                                 | <b>A***-SDQCR/L</b>                                                                 | <b>A***-SDUCR/L</b>                                                                 | <b>A***-SDZCR/L</b>                                                                 |        |
| 95°                                                                                 | 107,5°                                                                              | 93°                                                                                 | 95°                                                                                 | Angolo |
| A334                                                                                | A336                                                                                | A337                                                                                | A338                                                                                | Pagina |

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |  |  |  |        |
| <b>S***-SCFCR/L</b>                                                                 | <b>S***-SCLCR/L</b>                                                                 | <b>S***-SCLPR/L</b>                                                                 | <b>S***-SDQCR/L</b>                                                                 | <b>S***-SDQPR/L</b>                                                                 | <b>S***-SDUCR/L</b>                                                                 | <b>S***-SDUPR/L</b>                                                                   | <b>S***-SDZCR/L</b>                                                                   |        |
| 90°                                                                                 | 95°                                                                                 | 95°                                                                                 | 107,5°                                                                              | 107,5°                                                                              | 93°                                                                                 | 93°                                                                                   | 95°                                                                                   | Angolo |
| A352                                                                                | A334                                                                                | A348                                                                                | A336                                                                                | A349                                                                                | A337                                                                                | A350                                                                                  | A338                                                                                  | Pagina |

## Barre alesatrici

Barre alesatrici in acciaio con bloccaggio a vite

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|
|  |  |  |  |        |
| <b>A***-SSKCR/L</b>                                                               | <b>A***-STFCR/L</b>                                                               | <b>A***-SVQBR/L</b>                                                               | <b>A***-SVUBR/L</b>                                                               |        |
| 75°                                                                               | 90°                                                                               | 107.5°                                                                            | 93°                                                                               | Angolo |
| A339                                                                              | A341                                                                              | A345                                                                              | A346                                                                              | Pagina |

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |  |  |        |
| <b>S***-SSKCR/L</b>                                                               | <b>S***-STFCR/L</b>                                                               | <b>S***-STUPR/L</b>                                                               | <b>S***-SVQBR/L</b>                                                               | <b>S***-SVQCR/L</b>                                                               | <b>S***-SVUBR/L</b>                                                                | <b>S***-SVUCR/L</b>                                                                 |        |
| 75°                                                                               | 90°                                                                               | 93°                                                                               | 107.5°                                                                            | 107.5°                                                                            | 93°                                                                                | 93°                                                                                 | Angolo |
| A339                                                                              | A341                                                                              | A351                                                                              | A345                                                                              | A343                                                                              | A346                                                                               | A344                                                                                | Pagina |

Barre alesatrici in metallo duro integrale con bloccaggio a vite

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |  |  |        |
| <b>C***-SCLPR/L</b>                                                               | <b>C***-SDQPR/L</b>                                                               | <b>C***-SDUPR/L</b>                                                               | <b>C***-STUPR/L</b>                                                               | <b>C***-SVQCR/L</b>                                                               | <b>C***-SVUCR/L</b>                                                                | <b>C***-SZLNR/L</b>                                                                 |        |
| 95°                                                                               | 107.5°                                                                            | 93°                                                                               | 93°                                                                               | 107.5°                                                                            | 93°                                                                                | 95°                                                                                 | Angolo |
| A354                                                                              | A356                                                                              | A358                                                                              | A360                                                                              | A363                                                                              | A364                                                                               | A365                                                                                | Pagina |

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  |  |  |  |  |  |        |
| <b>E***-SCLCR/L</b>                                                                 | <b>E***-SCLPR/L</b>                                                                 | <b>E***-SDQCR/L</b>                                                                 | <b>E***-SDUCR/L</b>                                                                 | <b>E***-STFCR/L</b>                                                                 | <b>E***-STFPR/L</b>                                                                  | <b>E***-SVUCR/L</b>                                                                   |        |
| 95°                                                                                 | 95°                                                                                 | 107.5°                                                                              | 93°                                                                                 | 90°                                                                                 | 90°                                                                                  | 93°                                                                                   | Angolo |
| A355                                                                                | A354                                                                                | A357                                                                                | A359                                                                                | A361                                                                                | A362                                                                                 | A364                                                                                  | Pagina |

## This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting or typing. There are no margins, text, or other markings on the page.

## Tornitura

## Fresatura

## Foratura

## Informazioni tecniche

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A

Tornitura

## Inserti negativi

Finitura

XF

P



Geometria bilaterale per la finitura nel campo di applicazione P. Controllo del truciolo ottimale con forze di taglio ridotte.

B

Fresatura

RF

P



Geometria bilaterale per cicli che spaziano dalla finitura all'asportazione media.

C

Foratura

SF

P

M

K



Rompitruciolo bilaterale in combinazione con gradi Cermet. Geometria molto affilata con controllo del truciolo migliorato e elevata finitura superficiale. Ideale per lavorazioni con profondità di taglio e avanzamento ridotti.

D

Informazioni tecniche

DF

P

K



Rompitruciolo bilaterale con elevato controllo del truciolo. Adatto alla finitura e l'asportazione media di acciaio e ghise.

ADF

P

M



Rompitruciolo bilaterale rettificato con elevato controllo del truciolo. Ampio campo di applicazione grazie all'eccellente bilanciamento di affilatezza e stabilità del tagliente.

E

Indice



## Inserti negativi

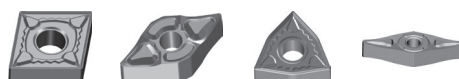
### Finitura

**EF** **M** **S**



Rompitrucciolo bilaterale con tagliente affilato e grande angolo di spoglia per la finitura di acciai inossidabili.

**NF** **S** **M**



Rompitrucciolo bilaterale con tagliente rettificato e grande angolo di spoglia per la finitura. Classe E per una migliore ripetibilità.

**NGF** **S** **M**



Rompitrucciolo bilaterale con tagliente rettificato e grande angolo di spoglia per la finitura. Classe E per una migliore ripetibilità.

### Raschiante

**WG** **P** **M** **K**



Rompitrucciolo bilaterale con geometria raschiante. Permette una finitura superficiale costante in caso di raddoppio dell'avanzamento.

### Asportazione media

**XM** **P**



Geometria bilaterale per l'asportazione media nel campo di applicazione P. Controllo del truciolo ottimale in caso di avanzamenti elevati e ridotti.

**A**

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**B**

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## Inserti negativi

Asportazione media

DM

P

K



Rompitruciolo bilaterale per lavorazione media. Ampio campo di applicazione grazie all'eccellente bilanciamento di affilatezza e stabilità del tagliente.

B

Fresatura

ZM

P



Rompitruciolo bilaterale per lavorazione media. Ampio campo di applicazione grazie al tagliente stabile e al grande angolo di spoglia. Particolarmente adatto anche per la lavorazione dell'acciaio.

C

Foratura

PM

P

K



Rompitruciolo bilaterale per lavorazione media. Ampio campo di applicazione per acciaio e ghise.

D

Informazioni tecniche

TC

K

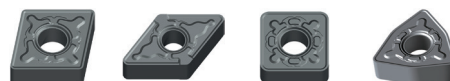
P



Rompitruciolo bilaterale con tagliente periferico. Affidabilità di processo grazie alla più elevata stabilità del tagliente.

TK

K



Geometria bilaterale per l'asportazione media nel campo di applicazione K. Straordinaria combinazione di affilatura del tagliente e resistenza agli impatti.

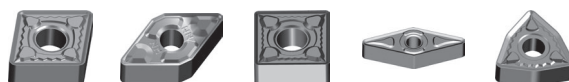
E

Indice

## Inserti negativi

### Asportazione media

**NM** **S** **M**



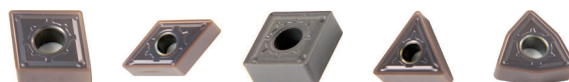
Rompitrucciolo bilaterale con tagliente affilato e grande angolo di spoglia per la lavorazione media di materiali a difficile asportazione.

**EM** **M** **S**



Rompitrucciolo bilaterale con tagliente affilato e grande angolo di spoglia. Affidabilità di processo nella lavorazione media di acciai inossidabili.

**EG** **M** **S**



Rompitrucciolo bilaterale con tagliente rettificato e grande angolo di spoglia. Ampio campo di applicazione nella lavorazione media di acciai inossidabili.

**Basic** **P** **K**



Rompitrucciolo bilaterale con tagliente periferico per lavorazione universale di acciaio e ghise.

### Sgrossatura

**DR Bilaterale** **P** **K**



Rompitrucciolo bilaterale con angolo di spoglia positivo e tagliente stabile per sgrossatura leggera e media di acciaio e ghise.

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## Inserti negativi

### Sgrossatura

**DR** Monolaterale **P** **K**



Rompitrucciolo monolaterale con angolo di spoglia positivo e tagliente stabile per sgrossatura leggera e media di acciaio e ghise.

B

Fresatura

**RH** **P**



Geometria bilaterale per operazioni dall'asportazione media alla sgrossatura.

C

Foratura

**LR** **P** **M**



Rompitrucciolo monolaterale con tagliente curvo e geometria a bugna dal design unico. Pressione di taglio ridotta per affidabilità di processo. Sgrossatura leggera di acciaio e acciaio inossidabile.

D

Informazioni tecniche

**ER** Bilaterale **M** **S**



Rompitrucciolo bilaterale con grande angolo di spoglia per basse forze di taglio. Adatto per la sgrossatura di acciai inossidabili.

**ER** Monolaterale **M** **S**



Rompitrucciolo monolaterale con grande angolo di spoglia per basse forze di taglio. Adatto per la sgrossatura di acciai inossidabili.

E

Indice

## Inserti negativi

### Sgrossatura

**HDR** **P** **K**



Rompitrucciolo monolaterale con elevata stabilità del tagliente e resistenza alla deformazione. Particolarmente adatto per la sgrossatura con profondità di taglio elevate di acciaio e acciaio inossidabile.

**HPR** **P** **K**



Rompitrucciolo monolaterale con elevata stabilità del tagliente e ampia tasca del rompitrucciolo. Particolarmente adatto per la sgrossatura pesante di acciaio e ghise.

**Flat** **K**



Inserto bilaterale senza rompitrucciolo. Versione stabile del tagliente grazie alla mancanza di microgeometria. Particolarmente adatto per la sgrossatura di ghise.

**SNR** **M** **S** **N**



Rompitrucciolo bilaterale per sgrossatura. Ampio campo di applicazione grazie all'eccellente bilanciamento di affilatezza e stabilità del tagliente.

### Inserti in PCBN & PCD

**Flat** **N** **H**



Con angolo esterno in CBN e PCD brasato. Per la lavorazione di acciaio temprato (CBN) o metalli non ferrosi (PCD).

**A**

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## Inserti negativi

Inserti in PCBN & PCD

Flat

H

K



Inserto in CBN integrale per la lavorazione di acciaio e ghise.

B

Fresatura

## Inserti ceramici

Flat

K

H



Inserti ceramici per la lavorazione di acciaio temprato, basso, e ghise.

C

Foratura

## Inserti positivi

Finitura di precisione

USF

P

M



Rompitruciolo monolaterale per finitura di precisione. Tagliente a spigolo vivo con profonde scanalature, particolarmente adatto per la lavorazione di pezzi di piccole dimensioni. Classe G per un'elevata ripetibilità.

D

Informazioni tecniche

R/L

P

M



Rompitruciolo monolaterale per finitura di precisione. Particolarmente adatto per ottime finiture superficiali. Classe G per un'elevata ripetibilità.

E

Indice

SF

P

M



Rompitruciolo monolaterale in combinazione con gradi Cermet. Geometria molto affilata con controllo del truciolo migliorato e elevata finitura superficiale. Ideale per lavorazioni con profondità di taglio e avanzamento ridotti.



## Inserti positivi

### Finitura

**XF**

**P**



Geometria monolaterale per la finitura nel campo di applicazione P. Controllo del truciolo ottimale con forze di taglio ridotte.

**HF**

**P**

**K**



Rompitrucciolo monolaterale con elevato controllo del truciolo. Adatto la finitura e l'asportazione media di acciaio e ghise.

**AHF**

**M**

**S**

**P**



Rompitrucciolo monolaterale rettificato con elevato controllo del truciolo. Ampio campo di applicazione grazie all'eccellente bilanciamento di affilatezza e stabilità del tagliente.

**EF**

**M**

**S**



Rompitrucciolo monolaterale con tagliente affilato e grande angolo di spoglia per la finitura di acciai inossidabili.

**NF**

**M**

**S**



Rompitrucciolo monolaterale con tagliente rettificato e grande angolo di spoglia per la finitura. Classe E per una migliore ripetibilità.

**A**

Tornitura

**B**

Fresatura

**C**

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A

Tornitura

## Inserti positivi

Finitura

NGF

M S



Rompitruciolo monolaterale con tagliente rettificato e grande angolo di spoglia per la finitura. Classe E per una migliore ripetibilità.

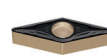
B

Fresatura

## Asportazione media

XM

P



Geometria monolaterale per l'asportazione media nel campo di applicazione P. Controllo del truciolo ottimale in caso di avanzamenti elevati e ridotti.

C

Foratura

TC

K P



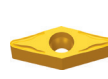
Rompitruciolo monolaterale con elevato controllo del truciolo. Adatto la finitura e l'asportazione media di acciaio e ghise.

D

Informazioni tecniche

HM

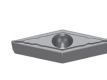
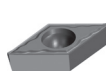
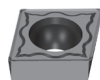
P K



Rompitruciolo monolaterale per lavorazione media. Ampio campo di applicazione grazie all'eccellente bilanciamento di affiltezza e stabilità del tagliente.

EM

M S



Rompitruciolo monolaterale con tagliente affilato e grande angolo di spoglia. Affidabilità di processo nella lavorazione media di acciai inossidabili.

E

Indice

## Inserti positivi

### Asportazione media

**Basic**

**P**

**K**

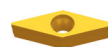


Rompitrucciolo monolaterale con tagliente periferico per lavorazione universale di acciaio e ghise.

### Sgrossatura

**Flat**

**K**



Inserto monolaterale senza rompitrucciolo. Versione stabile del tagliente grazie alla mancanza di microgeometria. Particolarmente adatto per la sgrossatura di ghise.

**HR**

**P**

**K**



Rompitrucciolo monolaterale con angolo di spoglia positivo e tagliente stabile per sgrossatura leggera e media di acciaio e ghise.

**SNR**

**S**

**M**



Rompitrucciolo monolaterale per sgrossatura. Ampio campo di applicazione grazie all'eccellente bilanciamento di affilatezza e stabilità del tagliente.

**Basic**

**P**

**K**



Rompitrucciolo monolaterale con tagliente periferico per lavorazione universale di acciaio e ghise.

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A

Tornitura

## Inserti positivi

Lavorazione alluminio

LC

N



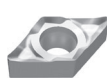
Rompitruciolo monolaterale con versione del tagliente straordinaria. Tagliente affilato con angolo di spoglia positivo. Classe G per un'elevata ripetibilità.

B

Fresatura

LH

N



Rompitruciolo monolaterale per la lavorazione di leghe di alluminio. Tagliente affilato con angolo di spoglia positivo. Classe G per un'elevata ripetibilità.

## Inserti in PCBN & PCD

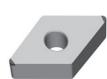
C

Foratura

Flat

N

H



Con angolo esterno in CBN o PCD brasato. Per la lavorazione di acciaio temprato (CBN) o metalli non ferrosi (PCD).

D

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MED

N



Geometria riportata al laser per la finitura e l'asportazione media.

E

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## Tornitura generale

Campo di applicazione dei rompitruccioli

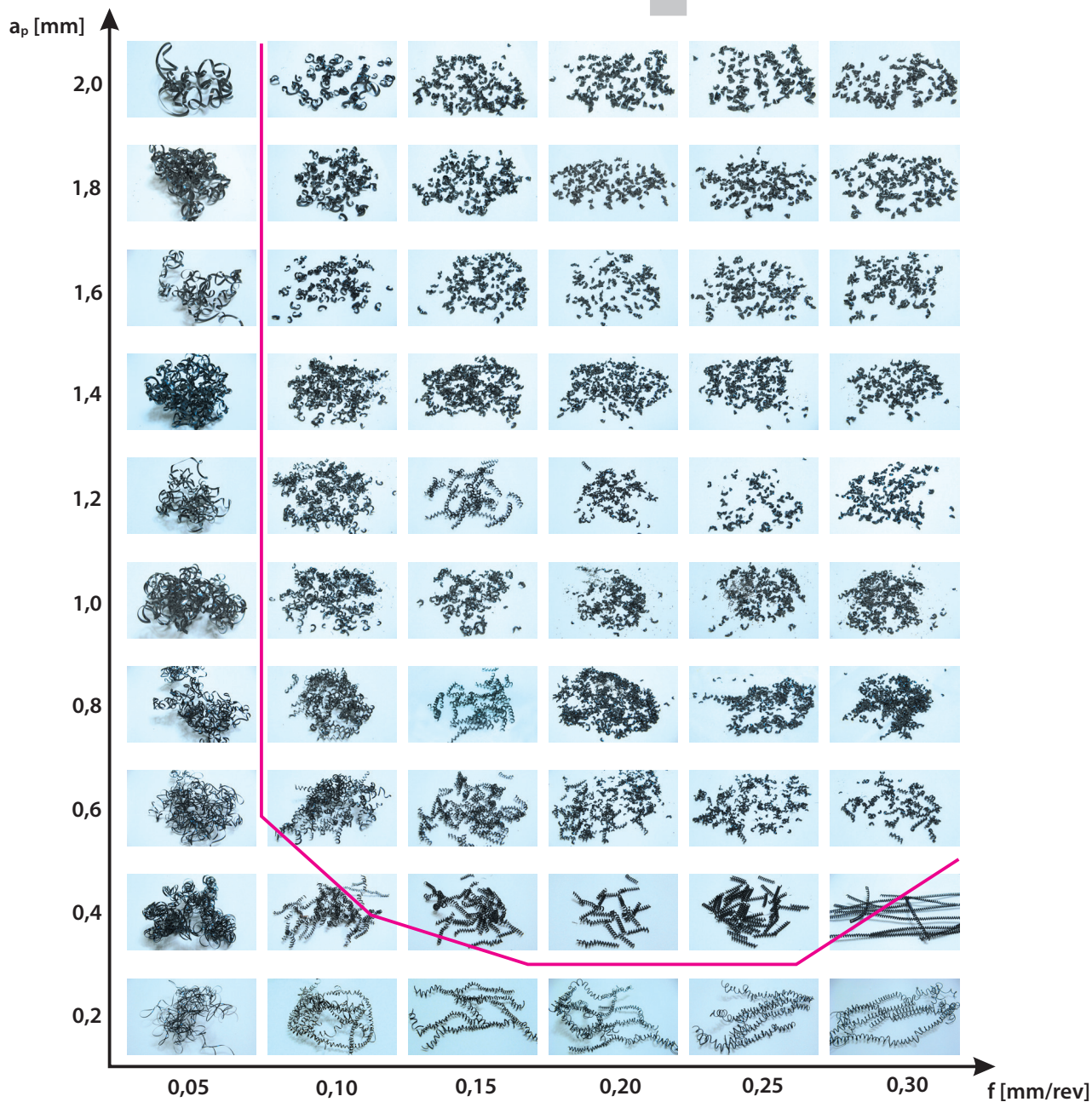
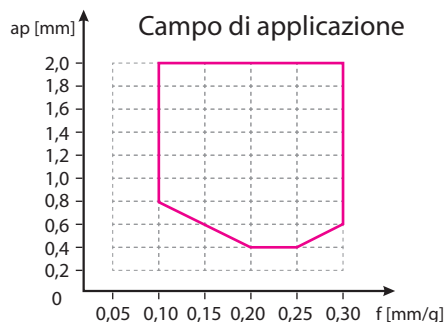
### Esempio

Inserto: CNMG120408-DF

Portautensile: PCLNL2525M12

Materiale: C45 Acciaio

$V_C$ : 200 m/min



**A**

Tornitura

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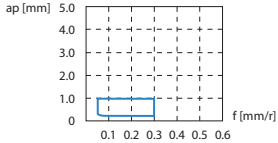
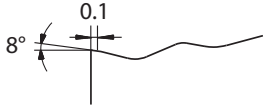
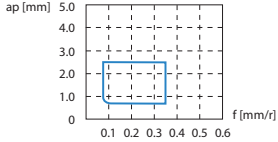
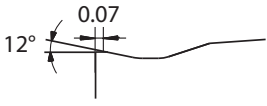
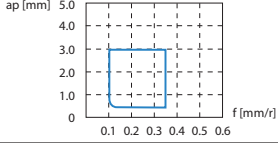
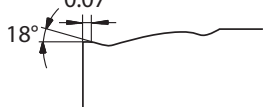
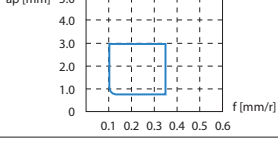
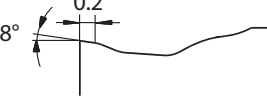
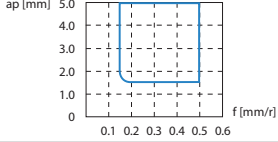
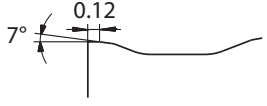
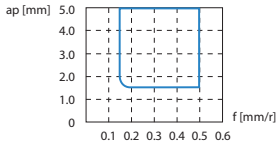
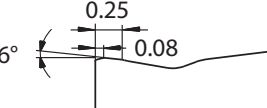
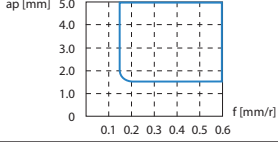
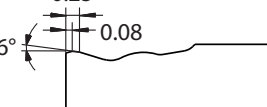
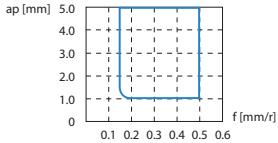
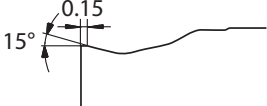
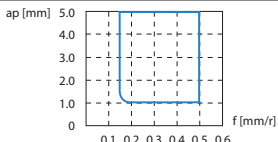
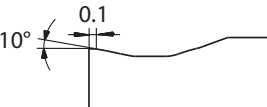
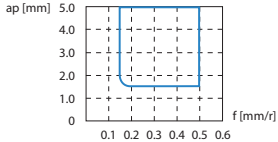
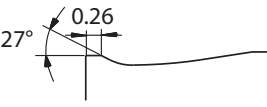
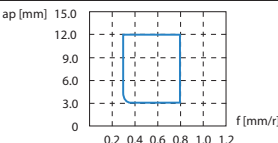
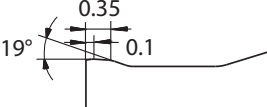
**E**

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## P Inserti positivi

| Rompitrucciolo | Applicazione           | Campo di applicazione | Versione tagliente |
|----------------|------------------------|-----------------------|--------------------|
| SF             | Finitura di precisione |                       |                    |
| HF             | Finitura               |                       |                    |
| AHF            | Finitura               |                       |                    |
| XF             | Finitura               |                       |                    |
| HM             | Asportazione media     |                       |                    |
| XM             | Asportazione media     |                       |                    |
| HR             | Sgrossatura            |                       |                    |

**P** Inserti negativi

| Rompitrucciolo | Applicazione           |                                                                                                                                                                                                                                                             | Campo di applicazione                                                                | Versione tagliente                                                                    |
|----------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SF             | Finitura di precisione |                                                                                                                                                                            |    |    |
| DF             | Finitura               |                                                                                           |    |    |
| XF             | Finitura               |                                                                                           |    |    |
| ADF            | Finitura               |                                                                                           |    |    |
| DM             | Asportazione media     |                                                                                         |   |   |
| PM             | Asportazione media     |    |  |  |
| ZM             | Asportazione media     |    |  |  |
| XM             | Asportazione media     |                                                                                       |  |  |
| WG             | Asportazione media     |                                                                                       |  |  |
| Basic          | Asportazione media     |                                                                                       |  |  |
| DR             | Sgrossatura            |    |  |  |

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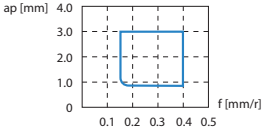
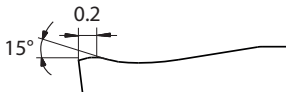
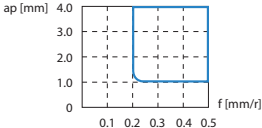
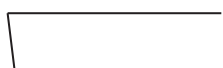
## P Inserti negativi

| Rompitrucciolo        | Applicazione | Campo di applicazione | Versione tagliente |
|-----------------------|--------------|-----------------------|--------------------|
| DR<br>(monolaterale)  | Sgrossatura  |                       |                    |
| LR<br>(monolaterale)  | Sgrossatura  |                       |                    |
| HDR<br>(monolaterale) | Sgrossatura  |                       |                    |
| HPR<br>(monolaterale) | Sgrossatura  |                       |                    |

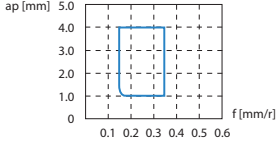
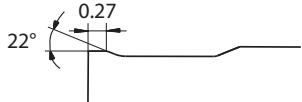
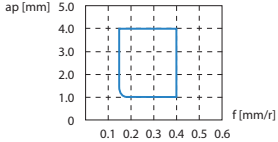
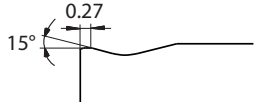
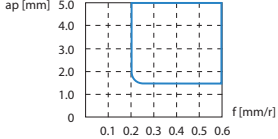
## P Inserti negativi (tecnologia ferroviaria)

| Rompitrucciolo | Applicazione | Campo di applicazione | Versione tagliente |
|----------------|--------------|-----------------------|--------------------|
| RF             | Finitura     |                       |                    |
| RH             | Sgrossatura  |                       |                    |

**K** Inserti positivi

| Rompitruciolo | Applicazione       |                                                                                   | Campo di applicazione                                                              | Versione tagliente                                                                  |
|---------------|--------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| TC            | Asportazione media |  |  |  |
| Flat          | Sgrossatura        |  |  |  |

**K** Inserti negativi

| Rompitruciolo | Applicazione       |                                                                                     | Campo di applicazione                                                                | Versione tagliente                                                                    |
|---------------|--------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| TK            | Asportazione media |    |    |    |
| TC            | Asportazione media |  |   |   |
| Flat          | Sgrossatura        |  |  |  |

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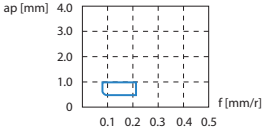
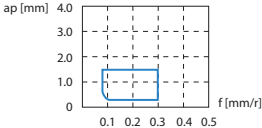
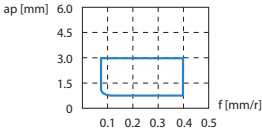
## M Inserti positivi

| Rompitrucciolo | Applicazione           | Campo di applicazione | Versione tagliente |
|----------------|------------------------|-----------------------|--------------------|
| USF            | Finitura di precisione |                       |                    |
| EF             | Finitura               |                       |                    |
| EM             | Asportazione media     |                       |                    |

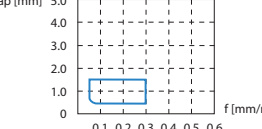
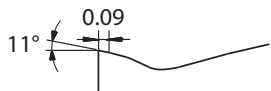
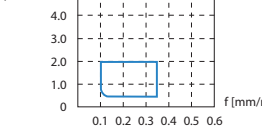
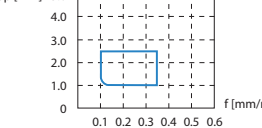
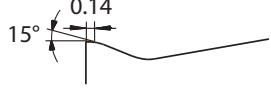
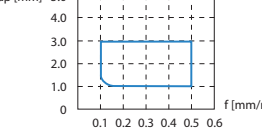
## M Inserti negativi

| Rompitrucciolo    | Applicazione       | Campo di applicazione | Versione tagliente |
|-------------------|--------------------|-----------------------|--------------------|
| EF                | Finitura           |                       |                    |
| EM                | Asportazione media |                       |                    |
| EG                | Asportazione media |                       |                    |
| ER                | Sgrossatura        |                       |                    |
| ER (monolaterale) | Sgrossatura        |                       |                    |

**S** Inserti positivi

| Rompitrucciolo | Applicazione |                                                                                                                                                                                                                                                       | Campo di applicazione                                                              | Versione tagliente                                                                  |
|----------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| NF             | Finitura     |                                                                                     |  |  |
| NGF            | Finitura     |                                                                                     |  |  |
| SNR            | Sgrossatura  |    |  |  |

**S** Inserti negativi

| Rompitrucciolo | Applicazione       |                                                                                                                                                                                                                                                             | Campo di applicazione                                                                | Versione tagliente                                                                    |
|----------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| NF             | Finitura           |                                                                                                                                                                          |   |   |
| NGF            | Asportazione media |                                                                                       |  |  |
| NM             | Asportazione media |                                                                                       |  |  |
| SNR            | Sgrossatura        |    |  |  |

**A**

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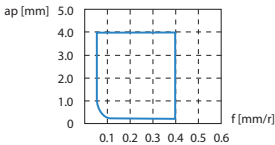
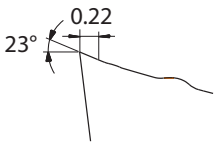
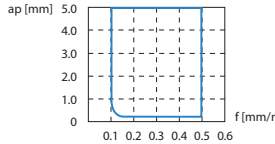
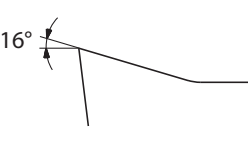
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| N             |              | Inserti positivi                                                                  |                                                                                    |                                                                                     |
|---------------|--------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Rompitruciolo | Applicazione |                                                                                   | Campo di applicazione                                                              | Versione tagliente                                                                  |
| LC            | Finitura     |  |  |  |
| LH            | Finitura     |  |  |  |

### Note

# A

## Tornitura

B

## Fresatura

C

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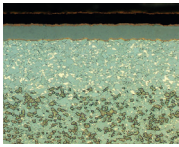
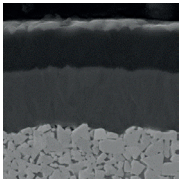
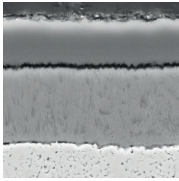
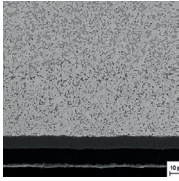
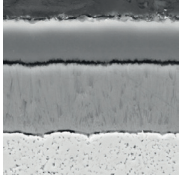
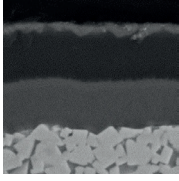
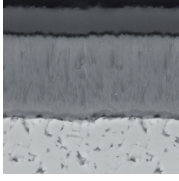
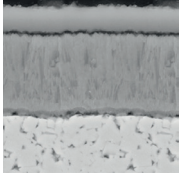
D

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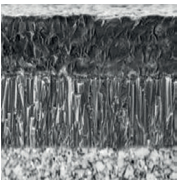
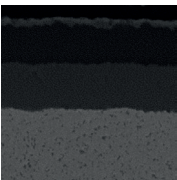
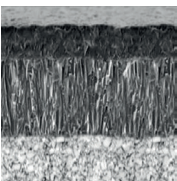
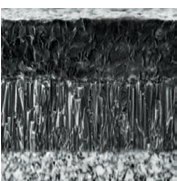
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## Metallo duro rivestito CVD

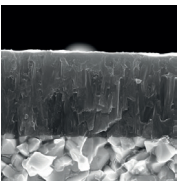
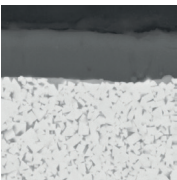
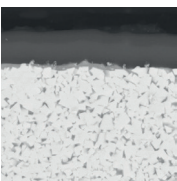
| Grado         | ISO       | Microstruttura                                                                      | Descrizione gradi                                                                                                                                                                                                                                                                  |
|---------------|-----------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YBC103</b> | P05 – P15 |    | Grado P10 con eccellente resistenza all'usura ad alte velocità di taglio. Il processo di sinterizzazione di ultima generazione e le tecnologie di rivestimento CVD consentono un'ampia gamma di applicazioni nell'area dei materiali P.                                            |
| <b>YB6315</b> | P05 – P20 |    | Grado di metallo duro con rivestimento in CVD P10-P20 adatto per lavorazioni dalla finitura all'asportazione media di acciaio, acciaio fuso e acciai al cromo. Eccellente caratteristiche per elevata velocità di taglio e temperatura, con eccellente resisten                    |
| <b>YBC152</b> | P10 – P20 |    | Grado di metallo duro con rivestimento in CVD P10-P20 adatto per lavorazioni dalla finitura all'asportazione media di acciaio e acciaio fuso. Eccellenti caratteristiche per elevate velocità di taglio e temperature, con eccellente resistenza all'usura.                        |
| <b>YBC203</b> | P15 – P25 |   | Grado P20 con eccellente resistenza all'usura e tenacia e resistenza alla frattura per una lavorazione sicura. L'innovativa procedura di sinterizzazione e le tecnologie di rivestimento CVD permettono di operare con un ampio spettro di applicazioni nel campo del materiale P. |
| <b>YBC252</b> | P20 - P35 |  | Grado di metallo duro con rivestimento in CVD P20-P35 adatto per lavorazioni dall'asportazione media alla sgrossatura di acciaio e acciaio fuso. Resistenza all'usura e tenacità ottimizzate per un ampio campo di applicazioni.                                                   |
| <b>YBC352</b> | P20 - P40 |  | Grado di metallo duro con rivestimento in CVD P20-P40 adatto per la sgrossatura di acciaio e acciaio fuso. Resistenza all'usura e tenacità ottimizzate per un ampio campo di applicazioni.                                                                                         |
| <b>YBM153</b> | M10 - M25 |  | Grado di metallo duro con rivestimento in CVD M10-M25 adatto per lavorazioni dalla finitura all'asportazione media di acciai inossidabili. Elevata resistenza all'usura e alla deformazione ad alte velocità di taglio.                                                            |
| <b>YBM253</b> | M15 - M35 |  | Grado di metallo duro con rivestimento in CVD M15-M35 adatto per lavorazioni da media fino alla sgrossatura di acciai inossidabili in un ampio campo di applicazioni. Elevata resistenza all'usura e alla deformazione per alte velocità di taglio. Metallo dur                    |



**Metallo duro rivestito CVD**

| Grado          | ISO       | Microstruttura                                                                     | Descrizione gradi                                                                                                                                                                                                                                     |
|----------------|-----------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YBD102</b>  | K05 - K20 |   | Grado di metallo duro rivestito in CVD K05-K20. Ottimale per l'asportazione media di ghisa, in particolare ghisa sferoidale, e acciaio pre-temprato ad alte velocità.                                                                                 |
| <b>YB7315</b>  | K10 - K25 |   | Grado di metallo duro con rivestimento in CVD K10-K25 per lavorazioni da media fino alla sgrossatura di materiali in ghisa. Resistenza all'usura e alla rottura migliorate ad alte velocità di taglio.                                                |
| <b>YBD152</b>  | K10 - K25 |   | Grado di metallo duro con rivestimento in CVD K10-K25 per lavorazioni da media fino alla sgrossatura di materiali in ghisa. Elevata resistenza all'usura e alla rottura ad alte velocità di taglio.                                                   |
| <b>YBD152C</b> | K10 - K25 |  | Grado di metallo duro con rivestimento spesso K10-K25 in CVD Al2O3 per lavorazioni da media fino alla sgrossatura di materiali in ghisa. Elevata resistenza all'usura e alla rottura ad alte velocità di taglio in combinazione con rompitruciolo TC. |

**Metallo duro rivestito PVD**

| Grado         | ISO       | Microstruttura                                                                      | Descrizione gradi                                                                                                                                                                                                                                                                                                                                            |
|---------------|-----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YBG101</b> | N05 - N20 |  | Grado di metallo duro N05 - N20 con rivestimento in PVD per lavorazioni che spaziano dalla finitura all'asportazione media di materiali in alluminio. Il rivestimento applicato unicamente sulla superficie del vano truciolo riduce, in combinazione con il rompitruciolo in alluminio, la formazione di tagliente di riporto e assicura un taglio morbido. |
| <b>YBG102</b> | S05 - S15 |  | Grado di metallo duro con rivestimento in PVD S05-S15 per lavorazioni dalla finitura all'asportazione media di superleghe, acciaio inossidabile e alluminio. Ottima resistenza all'usura in una vasta gamma di applicazioni.                                                                                                                                 |
| <b>YBG105</b> | S05 - S20 |  | Grado di metallo duro con rivestimento multistrato in PVD S05-S20 adatto per lavorazioni dalla finitura all'asportazione media di superleghe ma anche di acciai inossidabili. Ottima resistenza all'usura e alla temperatura in una vasta gamma di applicazioni.                                                                                             |

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Tornitura

**B**

Fresatura

**C**

Foratura

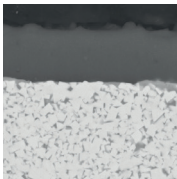
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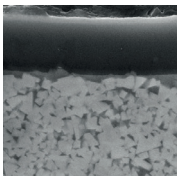
Tornitura

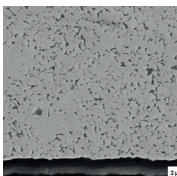
## Metallo duro rivestito PVD

| Grado         | ISO                               | Microstruttura                                                                    | Descrizione gradi                                                                                                                                                                                                                                                                                           |
|---------------|-----------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YBG205</b> | P10 - P30<br>M20 - M40<br>S15-S25 |  | Grado di metallo duro P10 - P30/M20 - M40/S15 - S25 con rivestimento in PVD multistrato per lavorazioni che spaziano dalla finitura all'asportazione media di acciaio inossidabile, superleghe e acciaio (fresatura). Resistenza all'usura e resistenza termica ottimali in un ampio campo di applicazione. |

B

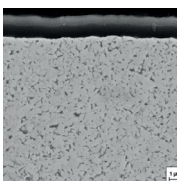
Fresatura

|               |                        |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                           |
|---------------|------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YB9320</b> | P10 - P30<br>M10 - M25 |  | Grado di metallo duro P10 - P30/M10 - M25 con rivestimento in PVD multistrato per lavorazioni che spaziano dalla finitura all'asportazione media di acciaio inossidabile, superleghe e acciaio (scanalatura/fresatura). Resistenza all'usura ottimale grazie all'adesione migliore del rivestimento e alla maggiore resistenza termica in un ampio campo di applicazione. |
|---------------|------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

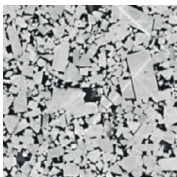
|               |           |                                                                                   |                                                                                                                                                                                                                                                                |
|---------------|-----------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YPD201</b> | S20 - S30 |  | Grado in metallo duro per asportazione media fino alla sgrossatura di materiali ad alta resistenza e ad alta lega. Grado ad alte prestazioni con elevata resistenza all'usura. Durezza e tensione residua bilanciate offrono un ampio spettro di applicazioni. |
|---------------|-----------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

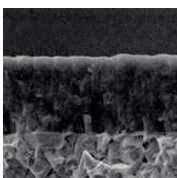
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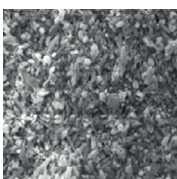
Foratura

|               |           |                                                                                    |                                                                                                                                                                                                                 |
|---------------|-----------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YBS103</b> | S10 - S20 |  | Grado per la lavorazione di materiali a base di nichel. Uno speciale substrato in metallo duro e l'ultima tecnologia di rivestimento PVD consentono un'ottima resistenza all'usura e un'alta stabilità termica. |
|---------------|-----------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Ceramici

| Grado         | ISO                    | Microstruttura                                                                      | Descrizione gradi                                                                                                                                                                                            |
|---------------|------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CA1000</b> | K10 - K25<br>H10 - H25 |  | Grado ceramico misto non rivestito K10-K25/H10-H25 per lavorazioni dalla finitura all'asportazione media di acciaio temprato e ghisa e ghisa sferoidale. Buona resistenza all'usura e tenacità alla rottura. |

|               |                        |                                                                                     |                                                                                                                                                                                                                                             |
|---------------|------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CM1000</b> | K10 - K25<br>H10 - H25 |  | Grado ceramico misto rivestito H10-H25/K10-K25 per cicli che spaziano dalla finitura alla lavorazione media di acciaio temprato, acciaio per utensili, acciaio HSS e ghisa sferoidale. Buona resistenza all'usura e tenacità alla frattura. |
|---------------|------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|               |           |                                                                                     |                                                                                                                                                                   |
|---------------|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CN1000</b> | K05 - K15 |  | Grado ceramico non rivestito K05-K15 Si3N4 per lavorazioni dalla finitura all'asportazione media di ghisa grigia. Buona resistenza all'usura e stabilità termica. |
|---------------|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|

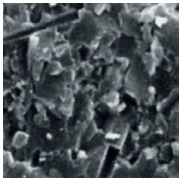
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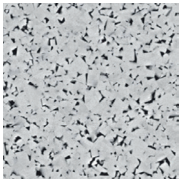
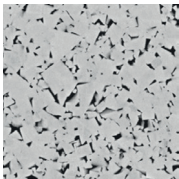
E

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**Ceramici**

| Grado         | ISO                  | Microstruttura                                                                    | Descrizione gradi                                                                                                                                                                                                                                                          |
|---------------|----------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CS1000</b> | S05 – S20            |                                                                                   | Grado ceramico SiAlON non rivestito per lavorazioni che spaziano dall'asportazione media alla sgrossatura di leghe a base di Ni e cobalto con velocità di taglio da medie a basse.                                                                                         |
| <b>CW1400</b> | S10 – S20<br>H10-H20 |  | Grado ceramico whisker non rivestito per velocità di taglio da medie a ridotte con acciaio HSS, materiali ad alto tenore di cromo e leghe a base di cobalto anche con taglio interrotto. Buona resistenza all'usura, resistenza all'usura ad intaglio e stabilità termica. |
| <b>CW1800</b> | S10 – S25            |                                                                                   | Grado ceramico whisker non rivestito per cicli che spaziano dalla finitura alla sgrossatura di leghe a base di Ni come Inconel, Nimonic o Hastelloy. Buona resistenza all'usura, resistenza all'usura ad intaglio e stabilità termica.                                     |

**Metallo duro non rivestito**

| Grado        | ISO                    | Microstruttura                                                                      | Descrizione gradi                                                                                                                             |
|--------------|------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YD101</b> | N05 - N20<br>K05 - K20 |  | Substrato in metallo duro non rivestito N05–N20/K05–K20 per lavorazioni dalla finitura all'asportazione media di alluminio e altri materiali. |
| <b>YD201</b> | N10 - N30<br>K10 - K30 |  | Substrato in metallo duro non rivestito K10–K30/N10–N30 per l'asportazione media di alluminio e altri materiali.                              |

**CBN**

| Grado         | ISO       | Microstruttura | Descrizione gradi                                                                                                                                               |
|---------------|-----------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YCB112</b> | S10 – S20 |                | Grado CBN S10 - S20 brasato non rivestito per la lavorazione di precisione di acciaio temprato e superleghe. Resistenza all'usura e stabilità termica ottimali. |

**A**

Tornitura

**B**

Fresatura

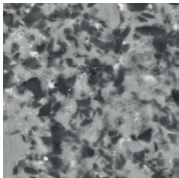
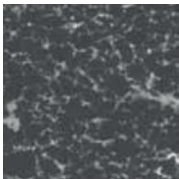
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| <b>C</b> | Foratura              |
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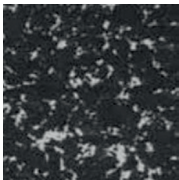
| CBN            |           |                                                                                   |                                                                                                                                                                                                                                      |
|----------------|-----------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Grado          | ISO       | Microstruttura                                                                    | Descrizione gradi                                                                                                                                                                                                                    |
| <b>YCB113</b>  | H01 - H10 |                                                                                   | Grado CBN brasato non rivestito H01–H10 per la finitura di acciaio temprato con taglio continuo. Elevata resistenza all'usura e produttività per alte velocità di taglio.                                                            |
| <b>YCB121</b>  | H10 - H25 |  | Grado CBN brasato non rivestito H10–H25 per lavorazioni dalla finitura all'asportazione media di acciaio temprato con taglio da continuo a leggermente interrotto. Buona resistenza all'usura e tenacità per impiego universale.     |
| <b>YCB131</b>  | H20 - H35 |  | Grado CBN brasato non rivestito H20–H35 per lavorazioni dalla finitura all'asportazione media di acciaio temprato con taglio interrotto. Buona resistenza all'usura e tenacità ottimale per affidabilità di processo.                |
| <b>YCB113C</b> | H01 - H10 |                                                                                   | Grado CBN H01 - H10 brasato rivestito per la finitura di acciaio temprato con taglio continuo. Elevata resistenza all'usura e produttività con elevate velocità di taglio.                                                           |
| <b>YCB121C</b> | H10 - H25 |                                                                                   | Grado CBN H10 - H25 brasato rivestito per lavorazioni dalla finitura all'asportazione media di acciaio temprato con taglio da liscio a leggermente interrotto. Buona resistenza all'usura e buona tenacia per un impiego universale. |
| <b>YCB131C</b> | H20 - H25 |                                                                                   | Grado CBN H20 - H35 brasato rivestito per lavorazioni dalla finitura all'asportazione media di acciaio temprato con taglio continuo a leggermente interrotto. Buona resistenza all'usura e tenacia ottimale per un processo sicuro.  |
| <b>YCB215</b>  | K10 - K20 |                                                                                   | Grado CBN K10 - K20 brasato non rivestito per lavorazioni dalla finitura all'asportazione media di materiali in ghisa. Buona resistenza all'usura e conducibilità termica.                                                           |
| <b>YZB630</b>  | H20 - H30 |                                                                                   | Grado CBN integrale H20 - H30 non rivestito per l'asportazione media di acciaio temprato con taglio da leggermente a mediamente interrotto. Buona combinazione di resistenza all'usura e stabilità termica.                          |

**CBN**

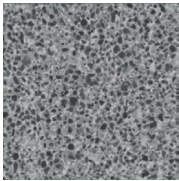
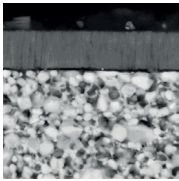
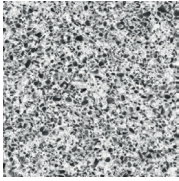
| Grado         | ISO       | Microstruttura | Descrizione gradi                                                                                                                                                                                       |
|---------------|-----------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YB630C</b> | H20 - H30 |                | Grado CBN integrale H20 - H30 rivestito per l'asportazione media di acciaio temprato con taglio da leggermente a mediamente interrotto. Buona combinazione di resistenza all'usura e stabilità termica. |

|              |           |  |                                                                                                                                                                                                              |
|--------------|-----------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YB223</b> | K10 - K25 |  | Grado ceramico misto non rivestito K10-K25/H10-H25 per lavorazioni dalla finitura all'asportazione media di acciaio temprato e ghisa e ghisa sferoidale. Buona resistenza all'usura e tenacità alla rottura. |
|--------------|-----------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**PCD**

| Grado         | ISO       | Microstruttura                                                                     | Descrizione gradi                                                                                                                                                                                                                                               |
|---------------|-----------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YCD421</b> | N01 - N10 |  | Grado non rivestito in PCD brasato N01-N10 per la finitura di leghe di alluminio con percentuali di Si minori del 12 %, materiali compositi, rame/magnesio e loro leghe. Grado a grana media con buona resistenza all'usura in una vasta gamma di applicazioni. |

**Cermet**

| Grado          | ISO       | Microstruttura                                                                      | Descrizione gradi                                                                                                                                                                                                                     |
|----------------|-----------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YNG151</b>  | P05 - P15 |  | Grado non rivestito in Cermet P05-P15 per la finitura di acciaio e acciaio inossidabile. Buona resistenza alla deformazione plastica. Consente un'ottima finitura superficiale.                                                       |
| <b>YNG151C</b> | P05 - P15 |  | Grado Cermet non rivestito in PVD P05-P15 per la finitura di acciaio e acciaio inossidabile. Buona resistenza all'usura e alla deformazione plastica. Consente un'ottima finitura superficiale.                                       |
| <b>YNT251</b>  | P10 - P25 |  | Grado non rivestito in Cermet P10-P25 per lavorazioni dalla finitura all'asportazione media di acciaio e acciaio inossidabile. Ottima resistenza all'usura e tenacità. Può essere utilizzato anche con taglio leggermente interrotto. |

**A**

Tornitura

**B**

Fresatura

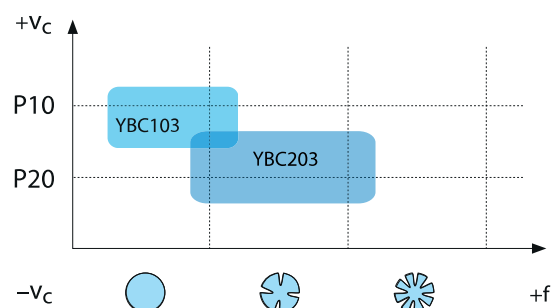
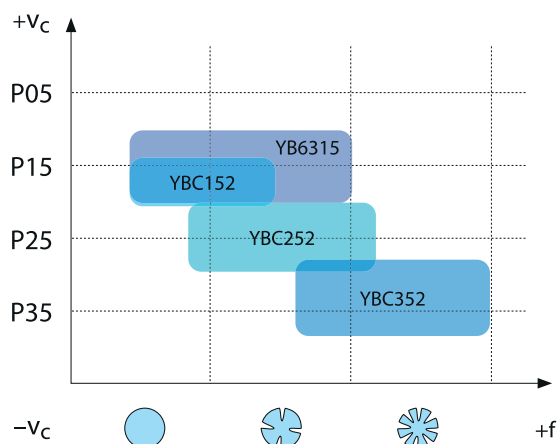
**C**

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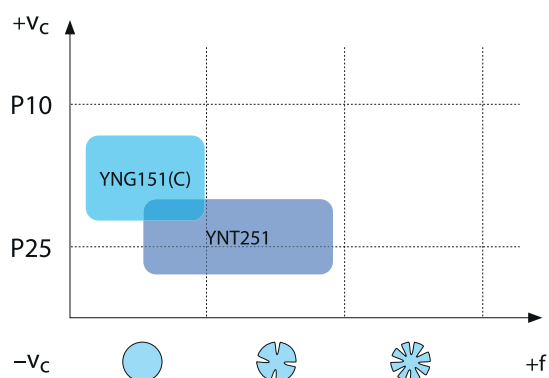
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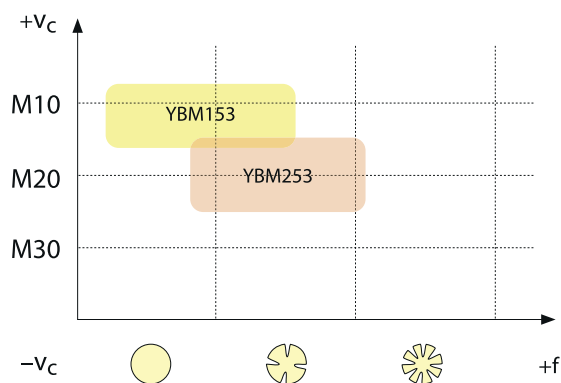
## Gradi di metallo duro con rivestimento in CVD per acciaio



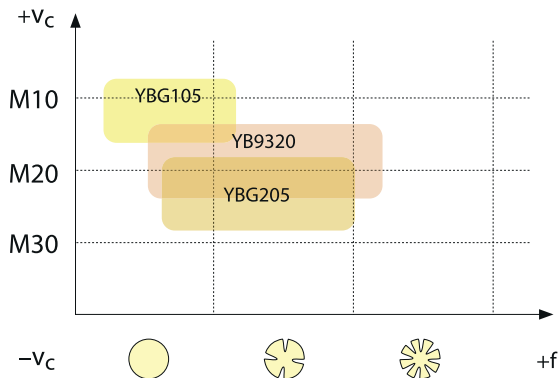
## Gradi Cermet per acciaio



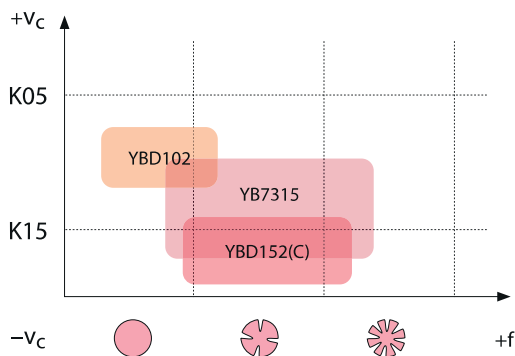
## Gradi di metallo duro con rivestimento in CVD per acciaio inossidabile



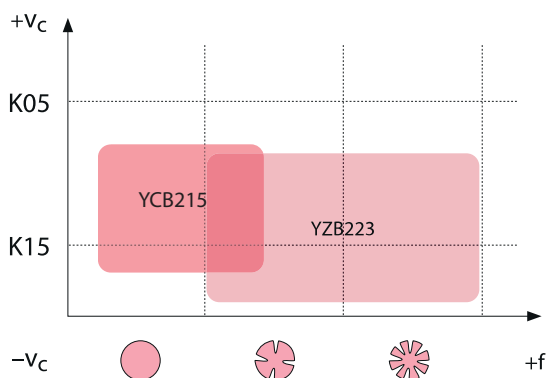
**Gradi di metallo duro con rivestimento in PVD per acciaio inossidabile**



**Gradi di metallo duro con rivestimento in CVD per ghisa**



**Gradi CBN per ghisa**



**A**

Tornitura

**B**

Fresatura

**C**

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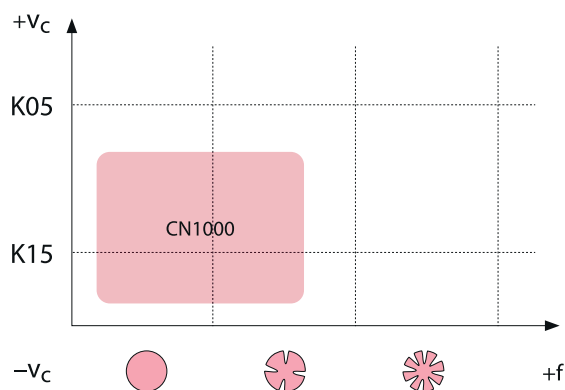
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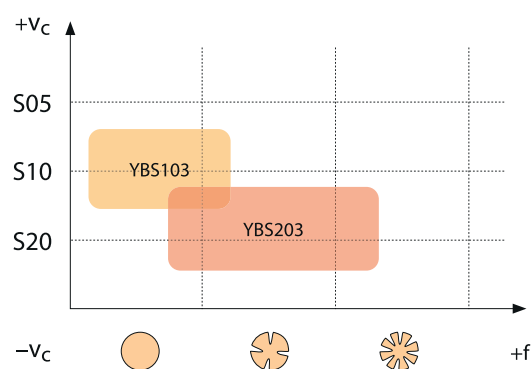
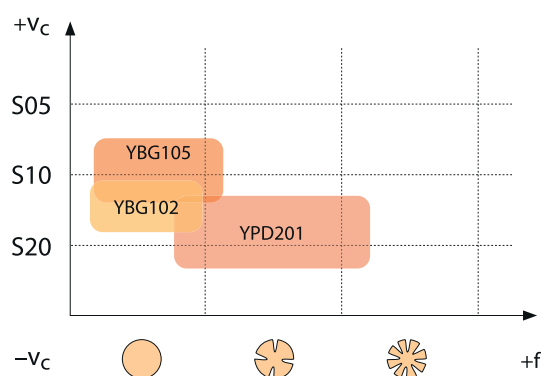
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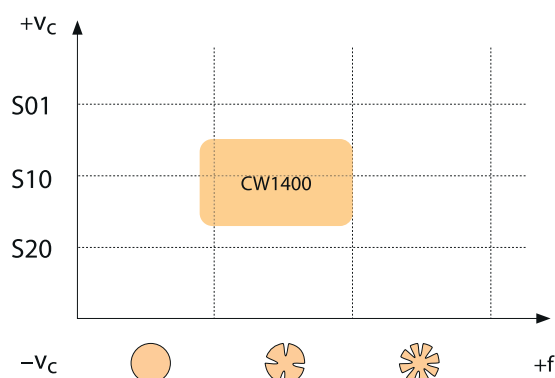
## Gradi ceramici per ghisa



## Gradi di metallo duro con rivestimento in PVD per superleghe

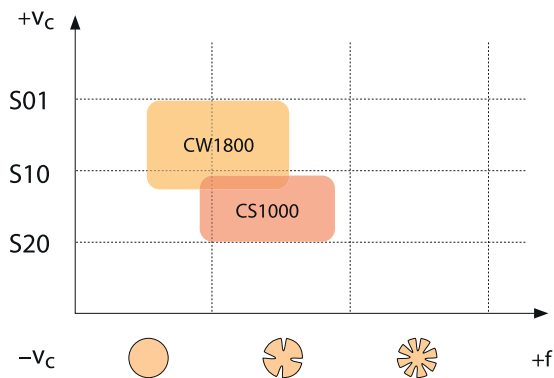


## Gradi ceramici per leghe a base di Co/HSS

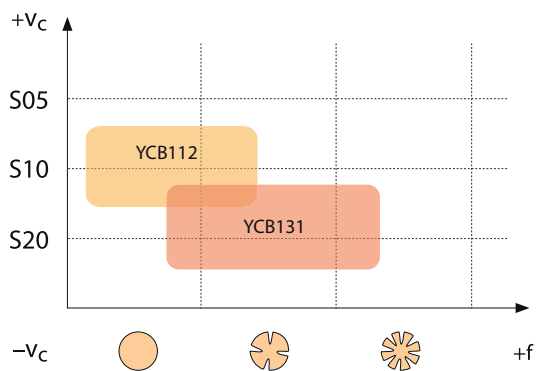




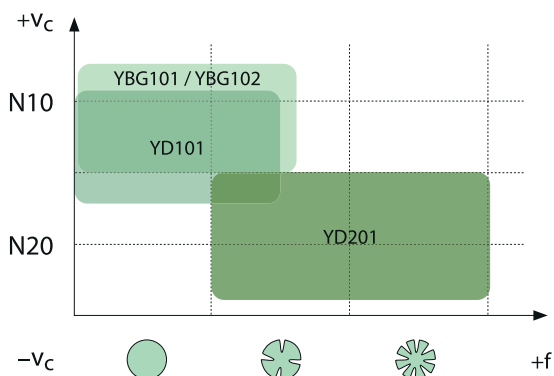
### Gradi ceramici per leghe a base di Ni



### Gradi CBN per superleghe



### Gradi di metallo duro per metalli non ferrosi



**A**

Tornitura

**B**

Fresatura

**C**

Foratura

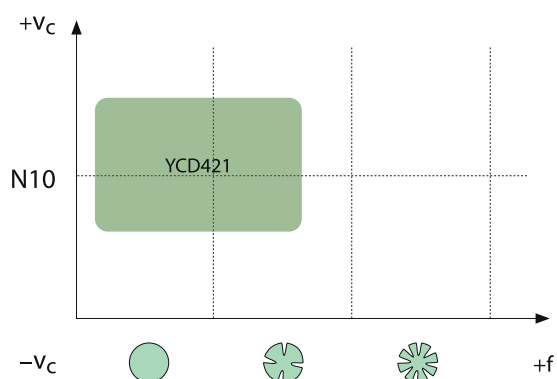
**D**

Informazioni  
tecniche

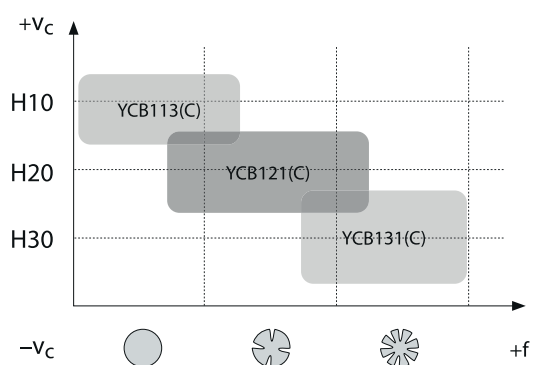
**E**

Indice

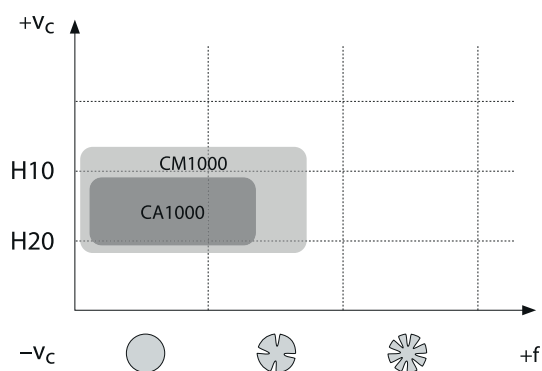
## Gradi PCD per metalli non ferrosi



## Gradi CBN per acciaio temprato



## Gradi ceramici per acciaio temprato



## Campi di applicazione dei gradi – lavorazioni di tornitura generiche

|          | ISO | HC <sup>1</sup> (CVD) | HC <sup>1</sup> (PVD) | HT | HC <sup>2</sup> | Ceramic | HW | CBN | PCD |
|----------|-----|-----------------------|-----------------------|----|-----------------|---------|----|-----|-----|
| <b>P</b> | P01 |                       |                       |    |                 |         |    |     |     |
|          | P10 | YBC103                |                       |    |                 |         |    |     |     |
|          | P20 | YB6315                |                       |    |                 |         |    |     |     |
|          | P30 | YBC152                |                       |    |                 |         |    |     |     |
|          | P40 | YBC203                |                       |    |                 |         |    |     |     |
|          | P50 | YBC252                |                       |    |                 |         |    |     |     |
| <b>M</b> | M01 |                       |                       |    |                 |         |    |     |     |
|          | M10 |                       |                       |    |                 |         |    |     |     |
|          | M20 | YBM153                |                       |    |                 |         |    |     |     |
|          | M30 | YBM253                |                       |    |                 |         |    |     |     |
|          | M40 |                       |                       |    |                 |         |    |     |     |
|          | M50 |                       |                       |    |                 |         |    |     |     |
| <b>K</b> | K01 |                       |                       |    |                 |         |    |     |     |
|          | K10 | YBD102                |                       |    |                 | CN1000  |    |     |     |
|          | K20 | YBD152                |                       |    |                 |         |    |     |     |
|          | K30 | YB7315                |                       |    |                 |         |    |     |     |
|          | K40 | YBD152C               |                       |    |                 |         |    |     |     |
| <b>N</b> | N01 |                       |                       |    |                 |         |    |     |     |
|          | N10 |                       |                       |    |                 |         |    |     |     |
|          | N20 |                       |                       |    |                 |         |    |     |     |
|          | N30 |                       |                       |    |                 |         |    |     |     |
|          | N40 |                       |                       |    |                 |         |    |     |     |
| <b>S</b> | S01 |                       |                       |    |                 |         |    |     |     |
|          | S10 |                       |                       |    |                 |         |    |     |     |
|          | S20 |                       |                       |    |                 |         |    |     |     |
|          | S30 |                       |                       |    |                 |         |    |     |     |
|          | S40 |                       |                       |    |                 |         |    |     |     |
| <b>H</b> | H01 |                       |                       |    |                 |         |    |     |     |
|          | H10 |                       |                       |    |                 |         |    |     |     |
|          | H20 |                       |                       |    |                 |         |    |     |     |
|          | H30 |                       |                       |    |                 |         |    |     |     |
|          | H40 |                       |                       |    |                 |         |    |     |     |

|          |                      |
|----------|----------------------|
| <b>P</b> | Acciaio              |
| <b>M</b> | Acciaio inossidabile |
| <b>K</b> | Ghisa                |

|          |                                    |
|----------|------------------------------------|
| <b>N</b> | Metalli non ferrosi                |
| <b>S</b> | Materiali a difficile asportazione |
| <b>H</b> | Materiali ad elevata durezza       |

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Metallo duro non rivestito

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni tecniche

**E**

Indice

## Standard ISO

**T N M G 22 04 08 (N) – DM**

**1 2 3 4 5 6 7 8 9**

| Forma dell'inserto                                                                  |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| A  | B  | C  |
| D  | E  | H  |
| K  | L  | M  |
| O  | P  | R  |
| S  | T  | V  |
| W  | Z Speciale                                                                          |                                                                                     |

**1**

| Angolo di spoglia inferiore                                                         |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| A  | B  |
| C  | D  |
| E  | F  |
| G  | N  |
| P  | O Speciale                                                                          |

**2**

| Grado di tolleranza |            |            |        |
|---------------------|------------|------------|--------|
| Code                | I.C [mm]   | m [mm]     | S [mm] |
| A                   | ±0,025     | ±0,005     | ±0,025 |
| C                   | ±0,025     | ±0,013     | ±0,025 |
| E                   | ±0,025     | ±0,025     | ±0,025 |
| F                   | ±0,013     | ±0,005     | ±0,025 |
| G                   | ±0,025     | ±0,025     | ±0,130 |
| H                   | ±0,013     | ±0,013     | ±0,025 |
| J                   | ±0,05-0,15 | ±0,005     | ±0,025 |
| K                   | ±0,05-0,15 | ±0,013     | ±0,025 |
| L                   | ±0,05-0,15 | ±0,025     | ±0,025 |
| M                   | ±0,05-0,15 | ±0,08-0,20 | ±0,130 |
| N                   | ±0,05-0,15 | ±0,08-0,20 | ±0,025 |
| U                   | ±0,08-0,25 | ±0,13-0,38 | ±0,130 |

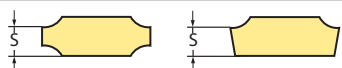
**3**

| Caratteristiche di fissaggio (metrico)                                                |                                                                                       |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Forma dell'inserto                                                                    |                                                                                       |
| A  | B  |
| C  | F  |
| G  | H  |
| J  | M  |
| N  | Q  |
| R  | T  |
| U  | W  |
| X Speciale                                                                            |                                                                                       |

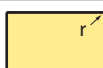
**4**

| Lunghezza tagliente [mm] |                    |    |    |    |    |    |    |    |
|--------------------------|--------------------|----|----|----|----|----|----|----|
| I.C [mm]                 | Forma dell'inserto |    |    |    |    |    |    |    |
|                          | C                  | D  | R  | S  | T  | V  | W  | K  |
| 3,97                     | 06                 |    |    |    |    |    |    |    |
| 5,0                      | 05                 |    |    |    |    |    |    |    |
| 5,56                     | 09                 |    |    |    |    |    |    |    |
| 6,0                      | 06                 |    |    |    |    |    |    |    |
| 6,35                     | 06                 | 07 |    |    | 11 | 11 |    |    |
| 8,0                      | 08                 |    |    |    |    |    |    |    |
| 9,525                    | 09                 | 11 | 09 | 09 | 16 | 16 | 06 | 16 |
| 10,0                     | 10                 |    |    |    |    |    |    |    |
| 12,0                     | 12                 |    |    |    |    |    |    |    |
| 12,7                     | 12                 | 15 | 12 | 12 | 22 | 22 | 08 |    |
| 15,875                   | 16                 |    | 15 | 15 | 27 |    |    |    |
| 16,0                     |                    | 19 | 16 |    |    |    |    |    |
| 19,05                    | 19                 |    | 19 | 19 | 33 |    |    |    |
| 20,0                     | 20                 |    |    |    |    |    |    |    |
| 25,0                     | 25                 | 25 | 25 |    |    |    |    |    |
| 25,4                     | 25                 |    |    |    |    |    |    |    |
| 31,75                    | 31                 |    |    |    |    |    |    |    |
| 32                       | 32                 |    |    |    |    |    |    |    |

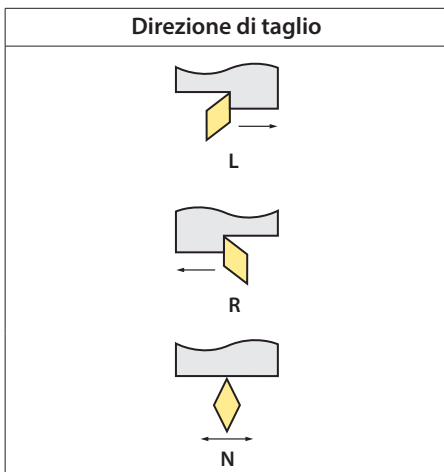
**5**

| Spessore dell'inserto S [mm]                                                      |      |      |       |
|-----------------------------------------------------------------------------------|------|------|-------|
|  |      |      |       |
| Code                                                                              | S    | Code | S     |
| 00                                                                                | 0,79 | T5   | 5,95  |
| T0                                                                                | 0,99 | 06   | 6,35  |
| 01                                                                                | 1,59 | T6   | 6,75  |
| T1                                                                                | 1,98 | 07   | 7,94  |
| 02                                                                                | 2,38 | 09   | 9,52  |
| T2                                                                                | 2,58 | T9   | 9,72  |
| 03                                                                                | 3,18 | 11   | 11,11 |
| T3                                                                                | 3,97 | 12   | 12,70 |
| 04                                                                                | 4,76 |      |       |
| T4                                                                                | 4,96 |      |       |
| 05                                                                                | 5,56 |      |       |

6

| Raggio di punta r [mm]                                                              |               |
|-------------------------------------------------------------------------------------|---------------|
|  |               |
| Code                                                                                | r             |
| 00                                                                                  | –             |
| 02                                                                                  | 0,2           |
| 04                                                                                  | 0,4           |
| 08                                                                                  | 0,8           |
| 12                                                                                  | 1,2           |
| 16                                                                                  | 1,6           |
| 20                                                                                  | 2,0           |
| 24                                                                                  | 2,4           |
| 32                                                                                  | 3,2           |
| X                                                                                   | Speciale      |
| MO                                                                                  | Inserti tondi |

7



8



9

## Standard ANSI

|   |   |   |   |   |   |   |     |   |    |
|---|---|---|---|---|---|---|-----|---|----|
| T | N | M | G | 4 | 3 | 2 | (N) | – | DM |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8   |   | 9  |

| Cerchio inscritto |        |         |
|-------------------|--------|---------|
| Code              | [mm]   | Pollici |
| 2                 | 6.35   | 0.250   |
| 3                 | 9.525  | 0.375   |
| 4                 | 12.7   | 0.500   |
| 5                 | 15.875 | 0.625   |
| 6                 | 19.05  | 0.750   |
| 8                 | 25.4   | 1.000   |

5

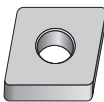
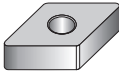
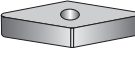
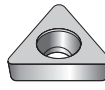
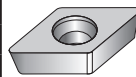
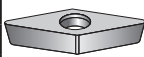
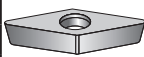
| Spessore dell'inserto |      |         |
|-----------------------|------|---------|
| Code                  | [mm] | Pollici |
| 2                     | 3.18 | 0.125   |
| 3                     | 4.76 | 0.187   |
| 4                     | 6.35 | 0.250   |
| 5                     | 7.94 | 0.313   |
| 6                     | 9.52 | 0.375   |

6

| Raggio di punta |      |         |
|-----------------|------|---------|
| Code            | [mm] | Pollici |
| 0               | 0.2  | 0.008   |
| 1               | 0.4  | 0.016   |
| 2               | 0.8  | 0.031   |
| 3               | 1.2  | 0.047   |
| 4               | 1.6  | 0.063   |
| 5               | 2.0  | 0.079   |
| 6               | 2.4  | 0.094   |

7

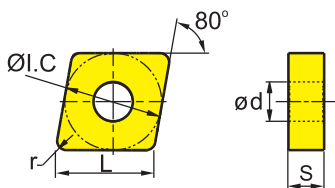
## Tabella comparativa per inserti per tornitura generale (sistema metrico/imperiale)

| Angolo negativo/Inserto                                                                                                            |        |         | Angolo positivo/Inserto                                                                                                            |        |           |
|------------------------------------------------------------------------------------------------------------------------------------|--------|---------|------------------------------------------------------------------------------------------------------------------------------------|--------|-----------|
| <div>Tipo C<br/>Forma<br/>dell'inserto</div>      | ISO    | Pollici | <div>Tipo W<br/>Forma<br/>dell'inserto</div>      | ISO    | Pollici   |
|                                                                                                                                    | 090304 | 321     |                                                                                                                                    | 06T304 | 3(2.5)1   |
|                                                                                                                                    | 090308 | 322     |                                                                                                                                    | 06T308 | 3(2.5)2   |
|                                                                                                                                    | 120404 | 431     |                                                                                                                                    | 06T312 | 3(2.5)3   |
|                                                                                                                                    | 120408 | 432     |                                                                                                                                    | 060404 | 331       |
|                                                                                                                                    | 120412 | 433     |                                                                                                                                    | 060408 | 332       |
|                                                                                                                                    | 120416 | 434     |                                                                                                                                    | 060412 | 333       |
|                                                                                                                                    | 160608 | 542     |                                                                                                                                    | 080404 | 431       |
|                                                                                                                                    | 160612 | 543     |                                                                                                                                    | 080408 | 432       |
|                                                                                                                                    | 160616 | 544     |                                                                                                                                    | 080412 | 433       |
|                                                                                                                                    | 190608 | 642     |                                                                                                                                    |        |           |
|                                                                                                                                    | 190612 | 643     |                                                                                                                                    |        |           |
|                                                                                                                                    | 190616 | 644     |                                                                                                                                    |        |           |
|                                                                                                                                    | 190624 | 646     |                                                                                                                                    |        |           |
|                                                                                                                                    | 250724 | 856     |                                                                                                                                    |        |           |
| 250732                                                                                                                             | 858    |         |                                                                                                                                    |        |           |
| 250924                                                                                                                             | 866    |         |                                                                                                                                    |        |           |
| 250932                                                                                                                             | 868    |         |                                                                                                                                    |        |           |
| <div>Tipo D<br/>Forma<br/>dell'inserto</div>    | 110404 | 331     | <div>Tipo T<br/>Forma<br/>dell'inserto</div>      | 113304 | 221       |
|                                                                                                                                    | 110408 | 332     |                                                                                                                                    | 110308 | 222       |
|                                                                                                                                    | 110412 | 333     |                                                                                                                                    | 160404 | 331       |
|                                                                                                                                    | 150404 | 431     |                                                                                                                                    | 160408 | 332       |
|                                                                                                                                    | 150408 | 432     |                                                                                                                                    | 160412 | 333       |
|                                                                                                                                    | 150412 | 433     |                                                                                                                                    | 220404 | 431       |
|                                                                                                                                    | 150604 | 441     |                                                                                                                                    | 220408 | 432       |
|                                                                                                                                    | 150608 | 442     |                                                                                                                                    | 220412 | 433       |
|                                                                                                                                    | 150612 | 443     |                                                                                                                                    | 220416 | 434       |
|                                                                                                                                    | 150616 | 444     |                                                                                                                                    | 270608 | 542       |
| 190608                                                                                                                             | 542    | 270612  | 543                                                                                                                                |        |           |
| 190612                                                                                                                             | 543    | 270616  | 544                                                                                                                                |        |           |
| <div>Tipo V<br/>Forma<br/>dell'inserto</div>    | 160404 | 331     | <div>Tipo S<br/>Forma<br/>dell'inserto</div>    | 090304 | 321       |
|                                                                                                                                    | 160408 | 332     |                                                                                                                                    | 090308 | 322       |
|                                                                                                                                    | 160412 | 333     |                                                                                                                                    | 090312 | 323       |
|                                                                                                                                    |        |         |                                                                                                                                    | 120404 | 431       |
|                                                                                                                                    |        | 120408  |                                                                                                                                    | 432    |           |
|                                                                                                                                    |        | 120412  |                                                                                                                                    | 433    |           |
|                                                                                                                                    |        | 120416  |                                                                                                                                    | 434    |           |
|                                                                                                                                    |        | 150608  |                                                                                                                                    | 542    |           |
|                                                                                                                                    |        | 150612  |                                                                                                                                    | 543    |           |
|                                                                                                                                    |        | 150616  |                                                                                                                                    | 544    |           |
|                                                                                                                                    |        | 190412  |                                                                                                                                    | 633    |           |
|                                                                                                                                    |        | 190424  |                                                                                                                                    | 636    |           |
|                                                                                                                                    |        | 190612  |                                                                                                                                    | 643    |           |
|                                                                                                                                    |        | 190616  |                                                                                                                                    | 644    |           |
|                                                                                                                                    |        | 250724  |                                                                                                                                    | 856    |           |
|                                                                                                                                    |        | 250732  |                                                                                                                                    | 858    |           |
|                                                                                                                                    |        | 250924  |                                                                                                                                    | 866    |           |
|                                                                                                                                    |        | 250932  |                                                                                                                                    | 868    |           |
| <div>Tipo R<br/>Forma<br/>dell'inserto</div>    | 0903MO | 32      |                                                                                                                                    |        |           |
|                                                                                                                                    | 1204MO | 43      |                                                                                                                                    |        |           |
|                                                                                                                                    |        |         |                                                                                                                                    |        |           |
|                                                                                                                                    |        |         |                                                                                                                                    |        |           |
|                                                                                                                                    |        |         |                                                                                                                                    |        |           |
|                                                                                                                                    |        |         |                                                                                                                                    |        |           |
| <div>Tipo C<br/>Forma<br/>dell'inserto</div>      | ISO    | Pollici | <div>Tipo T<br/>Forma<br/>dell'inserto</div>    | ISO    | Pollici   |
|                                                                                                                                    | 060202 | 2(1.5)0 |                                                                                                                                    | 06T102 | 1.2(1.2)0 |
|                                                                                                                                    | 060204 | 2(1.5)1 |                                                                                                                                    | 06T104 | 1.2(1.2)1 |
|                                                                                                                                    | 060208 | 2(1.5)2 |                                                                                                                                    | 06T108 | 1.2(1.2)2 |
|                                                                                                                                    | 09T302 | 3(2.5)0 |                                                                                                                                    | 090202 | 1.8(1.5)0 |
|                                                                                                                                    | 09T304 | 3(2.5)1 |                                                                                                                                    | 090204 | 1.8(1.5)1 |
|                                                                                                                                    | 09T308 | 3(2.5)2 |                                                                                                                                    | 090208 | 1.8(1.5)2 |
|                                                                                                                                    | 120404 | 431     |                                                                                                                                    | 110202 | 2(1.5)0   |
|                                                                                                                                    | 120408 | 432     |                                                                                                                                    | 110204 | 2(1.5)1   |
|                                                                                                                                    | 120412 | 433     |                                                                                                                                    | 110208 | 2(1.5)2   |
| <div>Tipo D<br/>Forma<br/>dell'inserto</div>    | 070202 | 2(1.5)0 | <div>Tipo S<br/>Forma<br/>dell'inserto</div>    | 060204 | 2(1.5)1   |
|                                                                                                                                    | 070204 | 2(1.5)1 |                                                                                                                                    | 09T302 | 3(2.5)0   |
|                                                                                                                                    | 070208 | 2(1.5)2 |                                                                                                                                    | 09T304 | 3(2.5)1   |
|                                                                                                                                    | 11T302 | 3(2.5)0 |                                                                                                                                    | 09T308 | 3(2.5) 2  |
|                                                                                                                                    | 11T304 | 3(2.5)1 |                                                                                                                                    | 120404 | 431       |
|                                                                                                                                    | 11T308 | 3(2.5)2 |                                                                                                                                    | 120408 | 432       |
|                                                                                                                                    | 11T312 | 3(2.5)3 |                                                                                                                                    | 120412 | 433       |
|                                                                                                                                    |        |         |                                                                                                                                    | 150404 | 531       |
|                                                                                                                                    |        |         |                                                                                                                                    | 150408 | 532       |
|                                                                                                                                    |        |         |                                                                                                                                    | 150412 | 533       |
|                                                                                                                                    |        | 190408  | 632                                                                                                                                |        |           |
|                                                                                                                                    |        | 190412  | 633                                                                                                                                |        |           |
|                                                                                                                                    |        | 190416  | 634                                                                                                                                |        |           |
| <div>Tipo V<br/>Forma<br/>dell'inserto</div>  |        |         | <div>Tipo V<br/>Forma<br/>dell'inserto</div>  | 110202 | 2(1.5)0   |
|                                                                                                                                    |        |         |                                                                                                                                    | 110204 | 2(1.5)1   |
|                                                                                                                                    |        |         |                                                                                                                                    | 110208 | 2(1.5)2   |
|                                                                                                                                    |        |         |                                                                                                                                    | 110302 | 220       |
|                                                                                                                                    |        |         |                                                                                                                                    | 110304 | 221       |
|                                                                                                                                    |        |         |                                                                                                                                    | 110308 | 222       |
|                                                                                                                                    |        |         |                                                                                                                                    | 160402 | 330       |
|                                                                                                                                    |        |         |                                                                                                                                    | 160404 | 331       |
|                                                                                                                                    |        |         |                                                                                                                                    | 160408 | 332       |
|                                                                                                                                    |        |         |                                                                                                                                    | 160412 | 333       |
|                                                                                                                                    |        |         |                                                                                                                                    |        |           |

## Inserti - Tornitura

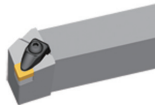
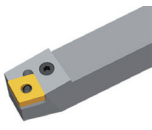
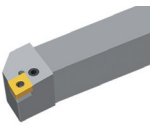
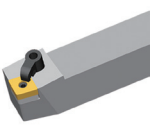
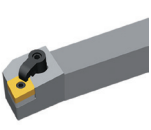
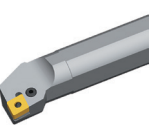
- Buone condizioni di lavorazione  
 ● Condizioni di lavorazione normali  
 ● Condizioni di lavorazione sfavorevoli

| CNMG  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 09 03 | 9,7  | 9,525 | 3,18 | 3,81 |
| 12 04 | 12,9 | 12,7  | 4,76 | 5,16 |

| CN** Inserti negativi                                                                                 |                |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |         |       |       |
|-------------------------------------------------------------------------------------------------------|----------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|--------|-----------------|--------|--------|--------|--------|---------|-------|-------|
|                      |                |     |                |           | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |                       |         | ●      | ●      | ●      | ●      |                 |        |        |        |        |         |       |       |
|                                                                                                       |                |     |                |           | M                     |        |        |        |        |        | ●      | ●      |        |        |                       |         | ●      | ●      | ●      | ●      | ●               | ●      | ●      |        |        |         |       |       |
|                                                                                                       |                |     |                |           | K                     |        |        |        |        |        |        |        | ●      | ●      | ●                     | ●       |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                                       |                |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         | ●      | ●      |        |        |                 |        |        |        | ●      | ●       |       |       |
|                                                                                                       |                |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        | ●      | ●      | ●               | ●      | ●      |        |        | ●       | ●     |       |
|                                                                                                       |                |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| ISO                                                                                                   |                | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320          | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>WG<br>Raschiante | CNMG120404-WG  | 0,4 | 0,25-3,00      | 0,05-0,25 |                       |        | ○      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                                       | CNMG120408-WG  | 0,8 | 0,5-5,0        | 0,15-0,70 |                       |        | ●      |        | ●      |        |        |        |        |        | ○                     |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                                       | CNMG120412-WG  | 1,2 | 0,8-6,0        | 0,20-0,75 |                       |        | ●      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                                       |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| <br>ADF<br>Finitura  | CNMG120404-ADF | 0,4 | 0,5-3,0        | 0,05-0,30 |                       | ●      |        |        |        |        |        |        |        |        |                       |         |        |        |        | ●      | ●               |        |        |        |        |         |       |       |
|                                                                                                       | CNMG120408-ADF | 0,8 | 0,5-3,0        | 0,1-0,4   |                       | ●      |        |        |        |        |        |        |        |        |                       |         |        |        |        | ○      | ●               |        |        |        | ●      |         |       |       |
|                                                                                                       | CNMG120412-ADF | 1,2 | 0,8-3,0        | 0,15-0,50 |                       | ○      |        |        |        |        |        |        |        |        |                       |         |        |        |        |        | ●               |        |        |        | ●      |         |       |       |
|                                                                                                       |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| <br>DF<br>Finitura | CNMG090304-DF  | 0,4 | 0,25-1,50      | 0,07-0,30 |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                                       | CNMG090308-DF  | 0,8 | 0,3-1,5        | 0,1-0,3   |                       |        | ●      |        | ○      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                                       | CNMG120404-DF  | 0,4 | 0,25-1,50      | 0,07-0,30 |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                                       | CNMG120408-DF  | 0,8 | 0,3-1,5        | 0,1-0,4   |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                                       | CNMG120412-DF  | 1,2 | 0,35-1,50      | 0,10-0,35 |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                                       |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| <br>EF<br>Finitura | CNMG090304-EF  | 0,4 | 0,5-2,0        | 0,05-0,20 |                       |        |        |        |        |        | ○      |        |        |        |                       |         |        |        |        | ●      |                 |        |        |        |        |         |       |       |
|                                                                                                       | CNMG090308-EF  | 0,8 | 0,5-2,0        | 0,05-0,25 |                       |        |        |        |        |        | ○      |        |        |        |                       |         |        |        |        | ●      |                 |        |        |        |        |         |       |       |
|                                                                                                       | CNMG120404-EF  | 0,4 | 0,5-2,5        | 0,05-0,20 |                       |        |        |        |        |        | ●      |        |        |        |                       |         |        |        |        | ●      |                 |        |        |        |        |         |       |       |
|                                                                                                       | CNMG120408-EF  | 0,8 | 0,5-2,5        | 0,05-0,25 |                       |        |        |        |        |        | ●      |        |        |        |                       |         |        |        |        | ●      |                 |        |        |        |        |         |       |       |
|                                                                                                       | CNMG120412-EF  | 1,2 | 0,5-2,5        | 0,10-0,35 |                       |        |        |        |        |        | ○      |        |        |        |                       |         |        |        |        | ○      |                 |        |        |        |        |         |       |       |
|                                                                                                       |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| <br>SF<br>Finitura | CNMG090304-SF  | 0,4 | 0,05-0,50      | 0,05-0,30 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        | ●      |         |       |       |
|                                                                                                       | CNMG120404-SF  | 0,4 | 0,1-1,5        | 0,05-0,30 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        | ●      |         |       |       |
|                                                                                                       | CNMG120408-SF  | 0,8 | 0,1-1,5        | 0,10-0,35 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        | ●      |         |       |       |
|                                                                                                       |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DCLNR/L                                                                             | PCBNR/L                                                                             | PCLNR/L                                                                             | MCBNR/L                                                                             | MCLNR/L                                                                              | A***-PCLNR/L                                                                          |
| Kr: 95°                                                                             | Kr: 75°                                                                             | Kr: 95°                                                                             | Kr: 75°                                                                             | Kr: 95°                                                                              | Kr: 95°                                                                               |
|  |  |  |  |  |  |
| A230                                                                                | A237                                                                                | A238                                                                                | A252                                                                                | A253                                                                                 | A324                                                                                  |

Codice sistema &gt; A48

Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

Dati di taglio &gt; A366



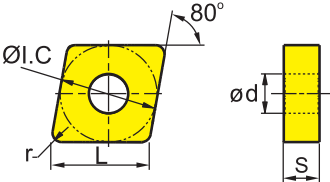
A

Tornitura

### Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CN**  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 12 04 | 12,9 | 12,7 | 4,76 | 5,16 |

| CN** Inserti negativi                                                                                   |               |     |         |           | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |        |         |       |       |   |   |   |   |
|---------------------------------------------------------------------------------------------------------|---------------|-----|---------|-----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|---|---|---|---|
|                        |               |     |         |           | P                     | ●              | ● | ●      | ●      | ●      | ●      | ●      | ●      | ●      | ●                     | ●      | ●      | ●      | ●               | ●      | ●      | ●      | ●      | ●      | ●      | ●      | ●      | ●      | ●       | ●     | ●     | ● | ● |   |   |
|                                                                                                         |               |     |         |           | M                     |                |   |        |        |        |        |        | ●      | ●      |                       |        |        |        |                 |        | ●      | ●      | ●      | ●      | ●      | ●      | ●      | ●      | ●       | ●     | ●     | ● | ● | ● | ● |
|                                                                                                         |               |     |         |           | K                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |   |   |   |   |
|                                                                                                         |               |     |         |           | N                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        | ●      | ●      |        |        |        |        |        |        |         |       |       |   |   | ● | ● |
|                                                                                                         |               |     |         |           | S                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        | ●      | ●      | ●      | ●       | ●     | ●     |   |   | ● | ● |
|                                                                                                         |               |     |         |           | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |   |   |   |   |
| ISO                                                                                                     |               |     |         |           | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C         | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |   |   |   |   |
| <br>NF<br><br>Finitura | CNEG120404-NF | 0,4 | 0,2-2,5 | 0,05-0,30 |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        | ○      | ●      |        |        |        |        |        |        |         |       | ○     |   |   |   |   |
|                                                                                                         | CNEG120408-NF | 0,8 | 0,2-2,5 | 0,10-0,35 |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        | ○      | ●      |        |        |        |        |        |        |         |       | ○     |   |   |   |   |
|                                                                                                         | CNEG120412-NF | 1,2 | 0,2-2,5 | 0,13-0,40 |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        | ○      | ●      |        |        |        |        |        |        |         |       | ○     |   |   |   |   |
|                                                                                                         |               |     |         |           |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |   |   |   |   |
| <br>XF<br><br>Finitura | CNMG120404-XF | 0,4 | 0,5-2,5 | 0,1-0,25  | ●                     |                |   | ●      |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |   |   |   |   |
|                                                                                                         | CNMG120408-XF | 0,8 | 0,5-2,5 | 0,1-0,30  | ●                     |                |   | ●      |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |   |   |   |   |
|                                                                                                         | CNMG120412-XF | 1,2 | 0,5-2,5 | 0,1-0,35  | ●                     |                |   | ●      |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |   |   |   |   |
|                                                                                                         |               |     |         |           |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |   |   |   |   |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

| Portautensile |         |         |         |         |              |
|---------------|---------|---------|---------|---------|--------------|
| DCLNR/L       | PCBNR/L | PCLNR/L | MCBNR/L | MCLNR/L | S***-PCLNR/L |
| Kr: 95°       | Kr: 75° | Kr: 95° | Kr: 75° | Kr: 95° | Kr: 95°      |
|               |         |         |         |         |              |
| A230          | A237    | A238    | A252    | A253    | A324         |

E

Indice

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366



## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CNMG  | L    | I.C    | S    | d    |
|-------|------|--------|------|------|
| 09 03 | 9,7  | 9,525  | 3,18 | 3,81 |
| 12 04 | 12,9 | 12,7   | 4,76 | 5,16 |
| 16 06 | 16,1 | 15,875 | 6,35 | 6,35 |
| 19 06 | 19,3 | 19,05  | 6,35 | 7,94 |

| CN** Inserti negativi                 |               |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        | HT      | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |         |       |       |
|---------------------------------------|---------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|---------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                                       |               |     |                | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |                       | ●      | ●      | ●      | ●       |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       |               |     |                | M                     |        |        |        |        | ●      | ●      |        |                       | ●      | ●      | ●      | ●       | ●               | ●      |        |        |        |        |        |        |        |         |       |       |
|                                       |               |     |                | K                     |        |        |        |        |        |        | ●      | ●                     | ●      | ●      |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       |               |     |                | N                     |        |        |        |        |        |        |        |                       | ●      | ●      |        |         |                 |        | ●      | ●      |        |        |        |        |        |         |       |       |
|                                       |               |     |                | S                     |        |        |        |        |        |        |        |                       |        | ●      | ●      | ●       | ●               | ●      |        | ●      | ●      |        |        |        |        |         |       |       |
|                                       |               |     |                | H                     |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                   |               | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C | YBG101          | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>PM</div> <div>Media Lavor.</div> | CNMG090304-PM | 0,4 | 0,4-4,0        | 0,1-0,3               |        |        |        |        | ●      |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG090308-PM | 0,8 | 0,5-4,0        | 0,15-0,50             |        |        |        |        | ●      |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG120404-PM | 0,4 | 0,4-5,5        | 0,1-0,3               |        |        | ●      | ●      |        |        |        |                       | ●      |        | ●      |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG120408-PM | 0,8 | 0,5-5,5        | 0,15-0,50             |        |        | ●      | ●      | ●      |        |        |                       | ●      |        | ●      |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG120412-PM | 1,2 | 0,8-5,5        | 0,18-0,60             |        |        | ●      | ●      |        |        |        |                       | ●      |        | ●      |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG120416-PM | 1,6 | 1,0-5,5        | 0,23-0,65             |        |        | ●      | ●      |        |        |        |                       | ●      |        | ●      |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG160608-PM | 0,8 | 0,5-7,2        | 0,15-0,50             |        |        | ○      | ●      |        |        |        |                       | ○      |        | ○      |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG160612-PM | 1,2 | 0,8-7,2        | 0,18-0,60             |        |        | ●      | ●      |        |        |        |                       | ●      |        | ●      |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG160616-PM | 1,6 | 1,0-7,2        | 0,23-0,65             |        |        |        | ●      |        |        |        |                       | ●      |        | ○      |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG190608-PM | 0,8 | 0,5-8,6        | 0,15-0,50             |        |        |        | ●      |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG190612-PM | 1,2 | 0,8-8,6        | 0,18-0,60             |        |        |        | ●      |        |        |        |                       | ○      |        | ●      |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG190616-PM | 1,6 | 1,0-8,6        | 0,23-0,65             |        |        |        | ○      |        |        |        |                       |        |        |        | ○       |                 |        |        |        |        |        |        |        |        |         |       |       |
| <div>XM</div> <div>Media Lavor.</div> | CNMG120404-XM | 0,4 | 1-4,2          | 0,2-0,3               | ●      |        | ○      |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG120408-XM | 0,8 | 1-4,2          | 0,2-0,4               | ●      |        | ●      |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG120412-XM | 1,2 | 1-4,2          | 0,2-0,6               | ●      |        | ●      |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG120416-XM | 1,6 | 1-4,2          | 0,2-0,65              | ●      |        | ●      |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG160608-XM | 0,8 | 1-5,6          | 0,2-0,4               | ●      |        | ●      |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG160612-XM | 1,2 | 1-5,6          | 0,2-0,6               | ●      |        | ●      |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG160616-XM | 1,6 | 1-5,6          | 0,2-0,65              | ○      |        | ●      |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG190608-XM | 0,8 | 1-6,65         | 0,2-0,4               | ●      |        | ●      |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG190612-XM | 1,2 | 1-6,65         | 0,2-0,6               | ○      |        | ●      |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                       | CNMG190616-XM | 1,6 | 1-6,65         | 0,2-0,65              | ○      |        | ●      |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile |         |         |         |         |              |
|---------------|---------|---------|---------|---------|--------------|
| DCLNR/L       | PCBNR/L | PCLNR/L | MCBNR/L | MCLNR/L | A***-PCLNR/L |
| Kr: 95°       | Kr: 75° | Kr: 95° | Kr: 75° | Kr: 95° | Kr: 95°      |
|               |         |         |         |         |              |
| A230          | A237    | A238    | A252    | A253    | A324         |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

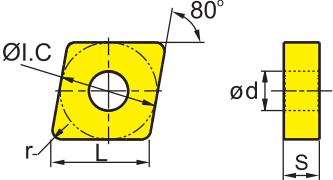
E

Indice

| CNMG  | L    | I.C    | S    | d    |
|-------|------|--------|------|------|
| 09 03 | 9,7  | 9,525  | 3,18 | 3,81 |
| 12 04 | 12,9 | 12,7   | 4,76 | 5,16 |
| 16 06 | 16,1 | 15,875 | 6,35 | 6,35 |
| 19 06 | 19,3 | 19,05  | 6,35 | 7,94 |

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura

| CN** Inserti negativi                                                                                     |               |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |  |
|-----------------------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|--|
|                          |               |     |                |           | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |                       |        | ●      | ●       |        | ●               | ●      | ●      |        |        |        |        |        |         |       |       |  |
|                                                                                                           |               |     |                |           | M                     |        |        |        |        |        | ●      | ●      |                       |        |        | ●       | ●      | ●               | ●      | ●      | ●      | ●      | ●      |        |        |         |       |       |  |
|                                                                                                           |               |     |                |           | K                     |        |        |        |        |        |        |        |                       | ●      | ●      | ●       | ●      |                 |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           |               |     |                |           | N                     |        |        |        |        |        |        |        |                       |        |        |         | ●      | ●               |        |        |        |        |        |        |        | ●       | ●     |       |  |
|                                                                                                           |               |     |                |           | S                     |        |        |        |        |        |        |        |                       |        |        |         |        | ●               | ●      | ●      | ●      | ●      |        |        |        | ●       | ●     |       |  |
|                                                                                                           |               |     |                |           | H                     |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
| ISO                                                                                                       |               | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |  |
| <br>DM<br>Media Lavor.  | CNMG090304-DM | 0,4 | 0,4-4,0        | 0,1-0,3   |                       |        | ●      |        | ●      |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG090308-DM | 0,8 | 0,5-4,0        | 0,15-0,50 |                       |        | ●      |        | ●      |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG090312-DM | 1,2 | 0,5-3,0        | 0,1-0,4   |                       |        |        |        |        | ○      |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG120404-DM | 0,4 | 0,4-5,5        | 0,1-0,3   |                       |        | ●      |        | ●      |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG120408-DM | 0,8 | 0,5-5,5        | 0,15-0,50 | ○                     | ●      |        | ●      | ●      | ●      | ○      | ●      |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG120412-DM | 1,2 | 0,8-5,5        | 0,18-0,60 | ○                     | ●      |        | ●      | ●      |        | ○      | ○      |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG120416-DM | 1,6 | 1,0-5,5        | 0,23-0,65 |                       |        | ○      |        | ●      |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG160608-DM | 0,8 | 0,5-7,2        | 0,15-0,50 |                       |        | ○      |        | ●      |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG160612-DM | 1,2 | 0,8-7,2        | 0,18-0,60 |                       |        | ●      |        | ●      |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG160616-DM | 1,6 | 1,0-7,2        | 0,23-0,65 |                       |        | ●      |        | ●      |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG190608-DM | 0,8 | 0,5-8,6        | 0,15-0,50 |                       |        | ●      |        | ●      |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG190612-DM | 1,2 | 0,8-8,6        | 0,18-0,60 |                       |        | ●      |        | ●      |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG190616-DM | 1,6 | 1,0-8,6        | 0,23-0,65 |                       |        |        |        |        | ●      |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
| <br>EG<br>Media Lavor. | CNMG120404-EG | 0,4 | 0,5-4,0        | 0,05-0,30 |                       |        |        |        |        |        | ●      | ●      |                       |        |        |         |        | ○               | ●      |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG120408-EG | 0,8 | 0,5-4,0        | 0,1-0,4   |                       |        |        |        |        |        | ●      | ●      |                       |        |        |         |        |                 | ●      | ●      |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG120412-EG | 1,2 | 0,5-4,0        | 0,2-0,5   |                       |        |        |        |        |        |        |        | ●                     |        |        |         |        |                 | ●      | ●      |        |        |        |        |        |         |       |       |  |
|                                                                                                           |               |     |                |           |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |
| <br>EM<br>Media Lavor. | CNMG120404-EM | 0,4 | 0,5-4,0        | 0,05-0,30 |                       |        |        |        |        |        | ●      | ●      |                       |        |        |         |        | ●               |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG120408-EM | 0,8 | 0,5-5,7        | 0,15-0,45 |                       |        |        |        |        |        | ●      | ●      |                       |        |        |         |        |                 | ●      |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG120412-EM | 1,2 | 0,5-5,7        | 0,25-0,60 |                       |        |        |        |        |        | ●      | ●      |                       |        |        |         |        |                 | ●      |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG160608-EM | 0,8 | 0,5-7,2        | 0,15-0,45 |                       |        |        |        |        |        | ●      | ●      |                       |        |        |         |        |                 | ●      |        |        |        |        |        |        |         |       |       |  |
|                                                                                                           | CNMG160612-EM | 1,2 | 0,5-7,2        | 0,25-0,60 |                       |        |        |        |        |        | ●      | ●      |                       |        |        |         |        |                 | ●      |        |        |        |        |        |        |         |       |       |  |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |         |         |         |              |
|---------------|---------|---------|---------|---------|--------------|
| DCLNR/L       | PCBNR/L | PCLNR/L | MCBNR/L | MCLNR/L | A***-PCLNR/L |
| Kr: 95°       | Kr: 75° | Kr: 95° | Kr: 75° | Kr: 95° | Kr: 95°      |
|               |         |         |         |         |              |
| A230          | A237    | A238    | A252    | A253    | A324         |

Codice sistema > A48

Scelta gradi > A42

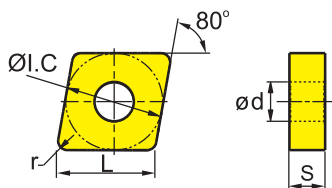
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

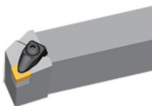
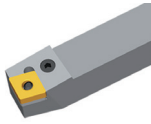
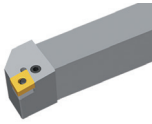
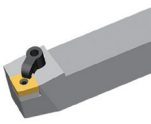
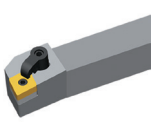
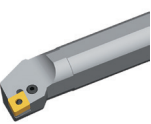
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CNMG  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 12 04 | 12,9 | 12,7 | 4,76 | 5,16 |

| CN** Inserti negativi                                                             |               |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|---------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |               |     |                | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        | ●                     | ●      |         | ●      | ●      | ●               |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |                | M                     |        |        |        |        |        | ●      | ●      |        |        |                       | ●      | ●       | ●      | ●      | ●               | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                   |               |     |                | K                     |        |        |        |        |        |        |        | ●      | ●      | ●                     | ●      |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |                | N                     |        |        |        |        |        |        |        |        |        |                       | ●      | ●       |        |        |                 |        |        |        | ●      | ●      |        |         |       |       |
|                                                                                   |               |     |                | S                     |        |        |        |        |        |        |        |        |        |                       |        | ●       | ●      | ●      | ●               | ●      |        |        | ●      | ●      |        |         |       |       |
|                                                                                   |               |     |                | H                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                                                                               |               | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| ZM                                                                                | CNMG120404-ZM | 0,4 | 0,5-3,0        | 0,05-0,30             | ●      |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMG120408-ZM | 0,8 | 0,5-4,0        | 0,1-0,5               | ○      |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| Media Lavor.                                                                      |               |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DCLNR/L                                                                             | PCBNR/L                                                                             | PCLNR/L                                                                             | MCBNR/L                                                                             | MCLNR/L                                                                              | S***-PCLNR/L                                                                          |
| Kr: 95°                                                                             | Kr: 75°                                                                             | Kr: 95°                                                                             | Kr: 75°                                                                             | Kr: 95°                                                                              | Kr: 95°                                                                               |
|  |  |  |  |  |  |
| A230                                                                                | A237                                                                                | A238                                                                                | A252                                                                                | A253                                                                                 | A324                                                                                  |

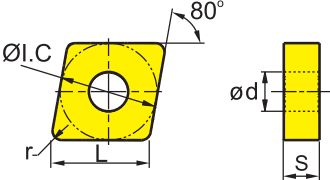
A

Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CNMG  | L    | I.C    | S    | d    |
|-------|------|--------|------|------|
| 12 04 | 12,9 | 12,7   | 4,76 | 5,16 |
| 16 06 | 16,1 | 15,875 | 6,35 | 6,35 |

| CN** Inserti negativi                                                                               |               |     |         |           | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        | HT     | HC <sup>2</sup> | HW      |        |        |        |        |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------------------------|---------------|-----|---------|-----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|-----------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                    |               |     |         |           | P                     | ●              | ● | ●      | ●      | ●      | ●      |        |        |        | ●                     | ●      | ●      | ●               |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |         |           | M                     |                |   |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●      | ●               | ●       | ●      | ●      |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |         |           | K                     |                |   |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |         |           | N                     |                |   |        |        |        |        |        |        |        | ●                     | ●      |        |                 |         |        | ●      | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |         |           | S                     |                |   |        |        |        |        |        |        |        |                       | ●      | ●      | ●               | ●       | ●      |        | ●      | ●      |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |         |           | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                 |               |     |         |           | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152          | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Media Lavor.   | CNMG120404-NM | 0,4 | 0,2-3,0 | 0,05-0,30 |                       |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        | ○      | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                                     | CNMG120408-NM | 0,8 | 0,2-4,0 | 0,1-0,5   |                       |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        | ○      | ●      | ●      | ●      |        |        |        | ○       |       |       |
|                                                                                                     | CNMG120412-NM | 1,2 | 0,2-4,0 | 0,2-0,6   |                       |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        | ○      | ●      |        |        |        |        |        |         |       |       |
| <br>Media Lavor.  | CNMG120404-TC | 0,4 | 0,5-5,0 | 0,08-0,40 |                       |                |   |        |        |        |        |        |        |        |                       |        | ●      | ●               |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | CNMG120408-TC | 0,8 | 0,5-5,0 | 0,15-0,50 |                       |                |   |        |        |        |        |        |        |        |                       |        | ●      | ●               |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | CNMG120412-TC | 1,2 | 0,5-5,0 | 0,2-0,6   |                       |                |   |        |        |        |        |        |        |        |                       |        | ●      | ●               |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | CNMG120416-TC | 1,6 | 0,5-5,0 | 0,20-0,65 |                       |                |   |        |        |        |        |        |        |        |                       |        | ●      | ○               |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | CNMG160608-TC | 0,8 | 1-7     | 0,15-0,50 |                       |                |   |        |        |        |        |        |        |        |                       |        | ●      | ●               |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | CNMG160612-TC | 1,2 | 1-7     | 0,2-0,6   |                       |                |   |        |        |        |        |        |        |        |                       |        | ●      | ●               |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | CNMG160616-TC | 1,6 | 1-7     | 0,20-0,65 |                       |                |   |        |        |        |        |        |        |        |                       |        | ●      | ○               |         |        |        |        |        |        |        |        |        |        |         |       |       |
| <br>Media Lavor. | CNMG120408-TK | 0,8 | 0,2-0,4 | 0,2-0,4   |                       |                |   |        |        |        |        |        |        |        |                       | ○      |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | CNMG120412-TK | 1,2 | 0,2-0,4 | 0,2-0,45  |                       |                |   |        |        |        |        |        |        |        |                       |        | ○      |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | CNMG120416-TK | 1,6 | 0,2-0,4 | 0,2-0,5   |                       |                |   |        |        |        |        |        |        |        |                       |        | ●      |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

| Portautensile |         |         |         |         |              |
|---------------|---------|---------|---------|---------|--------------|
| DCLNR/L       | PCBNR/L | PCLNR/L | MCBNR/L | MCLNR/L | S***-PCLNR/L |
| Kr: 95°       | Kr: 75° | Kr: 95° | Kr: 75° | Kr: 95° | Kr: 95°      |
|               |         |         |         |         |              |
| A230          | A237    | A238    | A252    | A253    | A324         |

E

Indice

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Scelta gradi > A42

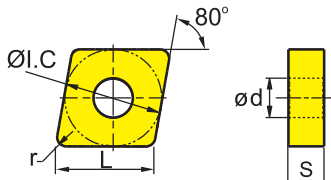
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

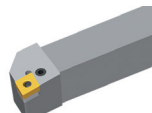
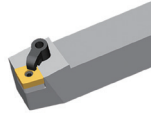
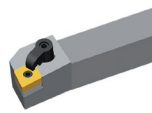
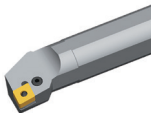
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CNMG  | L     | I.C    | S     | d    |
|-------|-------|--------|-------|------|
| 12 04 | 12,9  | 12,7   | 4,76  | 5,16 |
| 16 06 | 16,1  | 15,875 | 6,35  | 6,35 |
| 19 06 | 19,3  | 19,05  | 6,35  | 7,94 |
| 25 09 | 25,79 | 25,4   | 9,525 | 9,12 |

| CN** Inserti negativi                                                                              |                |      |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |         |       |       |
|----------------------------------------------------------------------------------------------------|----------------|------|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                   |                |      |                | P                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    |                |      |                | M                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    |                |      |                | K                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    |                |      |                | N                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    |                |      |                | S                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    |                |      |                | H                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                |                | r    | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Sgrossatura   | CNMG120408-DR  | 0,8  | 0,7-7,0        | 0,2-0,5               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    | CNMG120412-DR  | 1,2  | 1-7            | 0,25-0,70             |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    | CNMG120416-DR  | 1,6  | 1,5-7,0        | 0,32-0,75             |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    | CNMG160608-DR  | 0,8  | 0,7-8,0        | 0,2-0,5               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    | CNMG160612-DR  | 1,2  | 1-8            | 0,25-0,70             |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    | CNMG160616-DR  | 1,6  | 1,5-8,0        | 0,3-0,8               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    | CNMG190608-DR  | 0,8  | 0,7-10,0       | 0,2-0,5               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    | CNMG190612-DR  | 1,2  | 1-10           | 0,25-0,70             |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    | CNMG190616-DR  | 1,6  | 1,5-10,0       | 0,3-0,8               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    | CNMG190624-DR  | 2,4  | 2-10           | 0,32-0,90             |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| CNMG250924-DR                                                                                      | 2,4            | 2-15 | 0,4-1,0        |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| <br>Sgrossatura | CNMG120408-SNR | 0,8  | 1-3            | 0,1-0,4               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    | CNMG120412-SNR | 1,2  | 1-3            | 0,2-0,6               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    | CNMG160608-SNR | 0,8  | 2-6            | 0,1-0,4               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                    | CNMG190616-SNR | 1,6  | 2-7            | 0,2-0,6               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DCLNR/L                                                                             | PCBNR/L                                                                             | PCLNR/L                                                                             | MCBNR/L                                                                             | MCLNR/L                                                                              | S***-PCLNR/L                                                                          |
| Kr: 95°                                                                             | Kr: 75°                                                                             | Kr: 95°                                                                             | Kr: 75°                                                                             | Kr: 95°                                                                              | Kr: 95°                                                                               |
|  |  |  |  |  |  |
| A230                                                                                | A237                                                                                | A238                                                                                | A252                                                                                | A253                                                                                 | A324                                                                                  |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

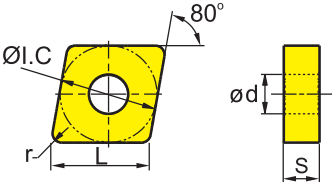
E

Indice

| CN**  | L     | I.C    | S     | d    |
|-------|-------|--------|-------|------|
| 12 04 | 12,9  | 12,7   | 4,76  | 5,16 |
| 16 06 | 16,1  | 15,875 | 6,35  | 6,35 |
| 19 06 | 19,3  | 19,05  | 6,35  | 7,94 |
| 25 07 | 25,79 | 25,4   | 7,94  | 9,12 |
| 25 09 | 25,79 | 25,4   | 9,525 | 9,12 |

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura

| CN** Inserti negativi                                                                                                    |               |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |         |       |       |
|--------------------------------------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                                         |               |     |                |           | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |                       | ●       | ●      | ●      | ●               |        |        |        |        |        |        |         |       |       |
|                                                                                                                          |               |     |                |           | M                     |        |        |        |        |        | ●      | ●      |        |        | ●                     | ●       | ●      | ●      | ●               | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                                                          |               |     |                |           | K                     |        |        |        |        |        |        |        |        | ●      | ●                     | ●       | ●      |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          |               |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         | ●      | ●      |                 |        |        | ●      | ●      |        |        |         |       |       |
|                                                                                                                          |               |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         | ●      | ●      | ●               | ●      | ●      |        | ●      | ●      |        |         |       |       |
|                                                                                                                          |               |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                                      |               | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>DR</div>  <div>Sgrossatura</div>   | CNMM120412-DR | 1,2 | 1,0-7,5        | 0,25-0,70 | ○                     | ●      |        |        | ●      | ●      | ○      | ○      |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMM160612-DR | 1,2 | 1,0-9,5        | 0,25-0,70 |                       | ●      |        |        | ●      |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMM160616-DR | 1,6 | 1,5-9,5        | 0,32-0,90 |                       | ●      |        |        | ●      |        | ○      |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMM190612-DR | 1,2 | 1-12           | 0,25-0,70 | ○                     | ●      |        |        | ●      | ●      |        | ●      |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMM190616-DR | 1,6 | 1,5-12,0       | 0,32-0,90 |                       | ●      |        |        | ●      | ●      |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMM190624-DR | 2,4 | 2-12           | 0,35-1,20 | ○                     | ●      |        |        | ●      |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMM250924-DR | 2,4 | 2,0-12,5       | 0,2-1,2   |                       | ●      |        |        | ●      |        | ○      |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| <div>ER</div>  <div>Sgrossatura</div> | CNMG120408-ER | 0,8 | 2,0-7,6        | 0,15-0,55 |                       |        |        |        |        |        |        | ○      |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMG120412-ER | 1,2 | 2,0-7,6        | 0,25-0,80 |                       |        |        |        |        |        |        | ○      |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMG160612-ER | 1,2 | 2-10           | 0,35-0,80 |                       |        |        |        |        |        |        | ○      |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMG160616-ER | 1,6 | 2-10           | 0,45-1,00 |                       |        |        |        |        |        |        | ○      |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMG190612-ER | 1,2 | 2,0-11,4       | 0,35-1,00 |                       |        |        |        | ○      |        | ○      |        |        |        |                       |         |        |        |                 | ○      |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMG190616-ER | 1,6 | 2,0-11,4       | 0,45-1,10 |                       |        |        |        |        |        |        | ○      |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| <div>ER</div>  <div>Sgrossatura</div> | CNMM250724-ER | 2,4 | 2,0-12,5       | 0,3-1,4   |                       |        |        |        | ●      |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMM250732-ER | 3,2 | 2,0-12,5       | 0,45-1,80 |                       |        |        |        | ○      |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMM250924-ER | 2,4 | 2,0-12,5       | 0,3-1,4   |                       |        |        |        | ●      |        | ○      |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                          | CNMM250932-ER | 3,2 | 2,0-12,5       | 0,45-1,80 |                       |        |        |        | ●      |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |         |         |         |              |
|---------------|---------|---------|---------|---------|--------------|
| DCLNR/L       | PCBNR/L | PCLNR/L | MCBNR/L | MCLNR/L | S***-PCLNR/L |
| Kr: 95°       | Kr: 75° | Kr: 95° | Kr: 75° | Kr: 95° | Kr: 95°      |
|               |         |         |         |         |              |
| A230          | A237    | A238    | A252    | A253    | A324         |

Codice sistema > A48

Scelta gradi > A42

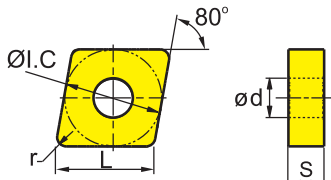
Informazioni tecniche > A501

Dati di taglio > A366

| CNMM  | L     | I.C    | S     | d    |
|-------|-------|--------|-------|------|
| 12 04 | 12,9  | 12,7   | 4,76  | 5,16 |
| 16 06 | 16,1  | 15,875 | 6,35  | 6,35 |
| 19 06 | 19,3  | 19,05  | 6,35  | 7,94 |
| 25 09 | 25,79 | 25,4   | 9,525 | 9,12 |

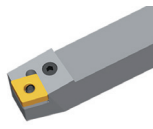
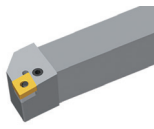
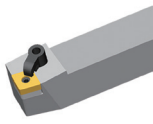
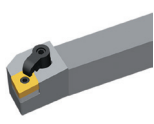
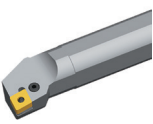
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura

| CN** Inserti negativi                                                                                                             |               |     |          |           | HC <sup>1</sup> (CVD) |   |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------|-----|----------|-----------|-----------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|--|--|
|                                                  |               |     |          |           | P                     | ● | ●      | ●      | ●      | ●      | ●      |        |        |        |                       |        | ●      | ●       |        | ●               | ●      | ●      |        |        |        |        |        |         |       |       |  |  |
|                                                                                                                                   |               |     |          |           | M                     |   |        |        |        |        |        | ●      | ●      |        |                       |        | ●      | ●       | ●      | ●               | ●      | ●      | ●      | ●      | ●      |        |        |         |       |       |  |  |
|                                                                                                                                   |               |     |          |           | K                     |   |        |        |        |        |        |        |        |        |                       | ●      | ●      | ●       | ●      |                 |        |        |        |        |        |        |        |         |       |       |  |  |
|                                                                                                                                   |               |     |          |           | N                     |   |        |        |        |        |        |        |        |        |                       |        |        |         | ●      | ●               |        |        |        |        |        |        |        |         | ●     | ●     |  |  |
|                                                                                                                                   |               |     |          |           | S                     |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 | ●      | ●      | ●      | ●      | ●      |        |        |         | ●     | ●     |  |  |
|                                                                                                                                   |               |     |          |           | H                     |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |
| ISO                                                                                                                               |               |     |          | r         | a <sub>p</sub>        | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |  |  |
| <div>LR</div> <div></div> <div>Sgrossatura</div> | CNMM120408-LR | 0,8 | 1-5      | 0,1-0,5   |                       |   | ●      | ●      |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |
|                                                                                                                                   | CNMM120412-LR | 1,2 | 2-6      | 0,2-0,7   |                       |   | ●      | ●      |        |        |        |        |        | ●      |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |
|                                                                                                                                   | CNMM120416-LR | 1,6 | 2,0-6,5  | 0,25-0,80 |                       |   |        | ●      |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |
|                                                                                                                                   | CNMM160608-LR | 0,8 | 1-7      | 0,2-0,6   |                       |   | ●      | ●      |        |        |        |        |        | ○      |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |
|                                                                                                                                   | CNMM160612-LR | 1,2 | 1,0-7,5  | 0,2-0,7   |                       |   | ●      | ●      |        |        |        |        |        | ●      |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |
|                                                                                                                                   | CNMM160616-LR | 1,6 | 1,0-8,5  | 0,25-0,80 | ○                     |   | ●      | ○      | ●      |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |
|                                                                                                                                   | CNMM190612-LR | 1,2 | 2,0-10,5 | 0,2-0,7   |                       |   | ●      | ●      |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |
|                                                                                                                                   | CNMM190616-LR | 1,6 | 2,0-10,5 | 0,3-1,0   |                       |   | ●      | ●      |        |        |        |        |        | ●      |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |
|                                                                                                                                   | CNMM190624-LR | 2,4 | 2,0-10,5 | 0,3-1,1   |                       |   | ●      | ○      |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |
|                                                                                                                                   | CNMM250924-LR | 2,4 | 2,0-12,5 | 0,3-1,2   |                       |   | ○      | ●      |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DCLNR/L                                                                             | PCBNR/L                                                                             | PCLNR/L                                                                             | MCBNR/L                                                                             | MCLNR/L                                                                              | S***-PCLNR/L                                                                          |
| Kr: 95°                                                                             | Kr: 75°                                                                             | Kr: 95°                                                                             | Kr: 75°                                                                             | Kr: 95°                                                                              | Kr: 95°                                                                               |
|  |  |  |  |  |  |
| A230                                                                                | A237                                                                                | A238                                                                                | A252                                                                                | A253                                                                                 | A324                                                                                  |



A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

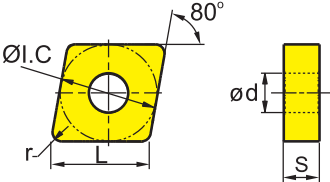
E

Indice

| CNMM  | L     | I.C    | S     | d    |
|-------|-------|--------|-------|------|
| 12 04 | 12,9  | 12,7   | 4,76  | 5,16 |
| 16 06 | 16,1  | 15,875 | 6,35  | 6,35 |
| 19 06 | 19,3  | 19,05  | 6,35  | 7,94 |
| 25 09 | 25,79 | 25,4   | 9,525 | 9,12 |

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CN** Inserti negativi                                                             |                |     |          |           | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|----------------|-----|----------|-----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |                |     |          |           | P                     | ●              | ● | ●      | ●      | ●      |        |        |        |        |                       | ●      | ●      | ●      | ●               |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |          |           | M                     |                |   |        |        |        |        | ●      | ●      |        |                       | ●      | ●      | ●      | ●               | ●      | ●      | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |          |           | K                     |                |   |        |        |        |        |        |        | ●      | ●                     | ●      | ●      |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |          |           | N                     |                |   |        |        |        |        |        |        |        |                       | ●      | ●      |        |                 |        |        |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                   |                |     |          |           | S                     |                |   |        |        |        |        |        |        |        |                       |        | ●      | ●      | ●               | ●      | ●      |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                   |                |     |          |           | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                               |                |     |          |           | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C         | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| Basic                                                                             | CNMM120404     | 0,4 | 0,5-7,0  | 0,1-0,5   |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM190612     | 1,2 | 0,5-10,5 | 0,1-0,8   |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM190616     | 1,6 | 0,5-10,5 | 0,1-1,0   |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
| Media Lavor.                                                                      |                |     |          |           |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
| HDR                                                                               | CNMM120408-HDR | 0,8 | 1-7      | 0,2-0,6   |                       |                |   | ●      | ●      |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM120412-HDR | 1,2 | 1-7      | 0,3-0,8   |                       |                |   | ○      | ●      |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM120416-HDR | 1,6 | 1-7      | 0,4-1,0   |                       |                |   | ●      | ●      |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM160612-HDR | 1,2 | 1,5-7,5  | 0,3-0,8   |                       |                |   | ●      | ●      |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM160616-HDR | 1,6 | 1,5-8,5  | 0,4-1,0   |                       |                |   | ○      | ●      |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM160624-HDR | 2,4 | 1,5-10,5 | 0,8-1,2   |                       |                |   | ○      | ○      |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM190608-HDR | 0,8 | 2,0-12,5 | 0,3-0,7   |                       |                |   | ○      |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM190612-HDR | 1,2 | 2,0-12,5 | 0,35-0,80 |                       |                |   | ○      | ●      |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM190616-HDR | 1,6 | 2,0-12,5 | 0,5-1,1   |                       |                |   | ○      | ●      | ●      |        |        |        |        |                       |        | ○      |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM190624-HDR | 2,4 | 2,0-12,5 | 0,8-1,2   |                       |                |   | ●      | ●      |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM250924-HDR | 2,4 | 2,0-12,5 | 0,8-1,4   |                       |                |   | ○      | ●      |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
| HPR                                                                               | CNMM190616-HPR | 1,6 | 2,0-10,5 | 0,5-1,0   |                       |                |   |        |        | ○      |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM190624-HPR | 2,4 | 2,0-10,5 | 0,7-1,4   |                       |                |   | ●      | ○      |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | CNMM250924-HPR | 2,4 | 2,0-12,5 | 0,7-1,4   |                       |                |   |        |        | ●      | ●      |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
| Sgrossatura                                                                       |                |     |          |           |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |         |         |         |              |
|---------------|---------|---------|---------|---------|--------------|
| DCLNR/L       | PCBNR/L | PCLNR/L | MCBNR/L | MCLNR/L | S***-PCLNR/L |
| Kr: 95°       | Kr: 75° | Kr: 95° | Kr: 75° | Kr: 95° | Kr: 95°      |
|               |         |         |         |         |              |
| A230          | A237    | A238    | A252    | A253    | A324         |

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

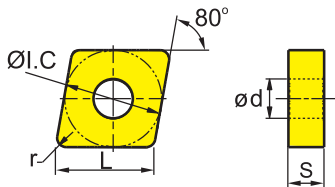
Dati di taglio > A366



## Inserti - Tornitura

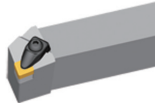
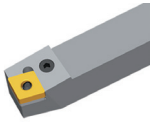
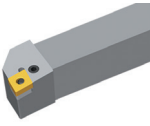
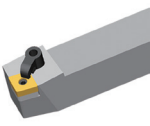
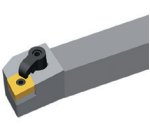
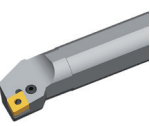
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CN**  | L    | I.C    | S    | d    |
|-------|------|--------|------|------|
| 12 04 | 12,9 | 12,7   | 4,76 | 5,16 |
| 16 06 | 16,1 | 15,875 | 6,35 | 6,35 |
| 19 06 | 19,3 | 19,05  | 6,35 | 7,94 |

| CN** Inserti negativi                                                                        |            |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|----------------------------------------------------------------------------------------------|------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|             |            |     |                |           | P                     |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              |            |     |                |           | M                     |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              |            |     |                |           | K                     |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              |            |     |                |           | N                     |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              |            |     |                |           | S                     |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              |            |     |                |           | H                     |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                          |            | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Flat    | CNMA120404 | 0,4 | 0,2-5,0        | 0,05-0,40 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMA120408 | 0,8 | 0,2-5,0        | 0,05-0,50 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMA120412 | 1,2 | 0,2-5,0        | 0,1-0,6   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMA120416 | 1,6 | 0,2-5,0        | 0,10-0,65 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMA160608 | 0,8 | 0,2-7,0        | 0,1-0,5   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMA160612 | 1,2 | 0,2-7,0        | 0,1-0,6   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMA160616 | 1,6 | 0,2-7,0        | 0,15-0,65 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMA190612 | 1,2 | 0,2-8,0        | 0,15-0,70 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMA190616 | 1,6 | 0,2-8,0        | 0,15-0,70 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| <br>Basic | CNMG120404 | 0,4 | 0,1-5,0        | 0,05-0,50 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMG120408 | 0,8 | 0,1-5,0        | 0,1-0,6   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMG120412 | 1,2 | 0,1-5,0        | 0,1-0,7   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMG160612 | 1,2 | 0,1-7,0        | 0,1-0,7   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMG190608 | 0,8 | 0,1-8,0        | 0,1-0,7   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMG190612 | 1,2 | 0,1-8,0        | 0,1-0,8   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                              | CNMG190616 | 1,6 | 0,1-8,0        | 0,1-1,0   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DCLNR/L                                                                             | PCBNR/L                                                                             | PCLNR/L                                                                             | MCBNR/L                                                                             | MCLNR/L                                                                              | S***-PCLNR/L                                                                          |
| Kr: 95°                                                                             | Kr: 75°                                                                             | Kr: 95°                                                                             | Kr: 75°                                                                             | Kr: 95°                                                                              | Kr: 95°                                                                               |
|  |  |  |  |  |  |
| A230                                                                                | A237                                                                                | A238                                                                                | A252                                                                                | A253                                                                                 | A324                                                                                  |

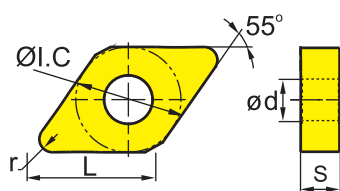
A

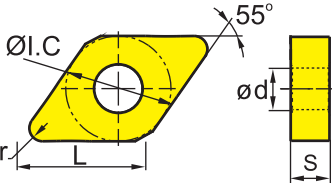
Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DN**  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 11 04 | 11,6 | 9,525 | 4,76 | 3,81 |
| 15 04 | 15,5 | 12,7  | 4,76 | 5,16 |
| 15 06 | 15,5 | 12,7  | 6,35 | 5,16 |



| DN** Inserti negativi                                                             |                |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|----------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|--------|-----------------|--------|--------|--------|--------|---------|-------|-------|
|  |                |     |                |           | P                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   |                |     |                |           | M                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   |                |     |                |           | K                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   |                |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   |                |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   |                |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| ISO                                                                               |                | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320          | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| WG                                                                                | DNMX110404-WG  | 0,4 | 0,2-1,5        | 0,08-0,30 |                       |        | ○      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | DNMX110408-WG  | 0,8 | 0,5-3,5        | 0,15-0,50 |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| Raschiante                                                                        | DNMX150408-WG  | 0,8 | 0,5-5,0        | 0,15-0,70 |                       |        | ○      |        |        | ○      |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | DNMX150608-WG  | 0,8 | 0,5-5,0        | 0,15-0,70 |                       |        | ○      |        | ○      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | DNMX150612-WG  | 1,2 | 0,8-6,0        | 0,20-0,75 |                       |        | ○      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| ADF                                                                               | DNMG150604-ADF | 0,4 | 0,5-6,0        | 0,15-0,50 | ○                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 | ●      |        |        | ○      |         |       |       |
|                                                                                   | DNMG150608-ADF | 0,8 | 0,1-4,0        | 0,08-0,50 | ○                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        | ●      | ●               |        |        |        | ○      |         |       |       |
|                                                                                   | DNMG150612-ADF | 1,2 | 0,5-4,0        | 0,15-0,50 | ○                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 | ●      |        |        |        |         |       |       |
|                                                                                   |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| Finitura                                                                          |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| DF                                                                                | DNMG110404-DF  | 0,4 | 0,15-2,00      | 0,08-0,25 |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | DNMG110408-DF  | 0,8 | 0,15-2,00      | 0,1-0,3   |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | DNMG110412-DF  | 1,2 | 0,35-1,50      | 0,15-0,50 |                       |        | ○      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | DNMG150404-DF  | 0,4 | 0,15-2,00      | 0,08-0,25 |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | DNMG150408-DF  | 0,8 | 0,15-2,00      | 0,1-0,3   |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | DNMG150412-DF  | 1,2 | 0,35-1,50      | 0,15-0,50 |                       |        |        |        |        | ○      |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | DNMG150604-DF  | 0,4 | 0,8-6,0        | 0,18-0,60 |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | DNMG150608-DF  | 0,8 | 0,15-2,00      | 0,1-0,3   |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | DNMG150612-DF  | 1,2 | 0,2-2,5        | 0,10-0,35 |                       |        | ●      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| SF                                                                                | DNMG110404-SF  | 0,4 | 0,05-0,50      | 0,05-0,25 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        | ●       |       |       |
|                                                                                   | DNMG150404-SF  | 0,4 | 0,05-0,50      | 0,05-0,25 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        | ●       |       |       |
|                                                                                   | DNMG150408-SF  | 0,8 | 0,05-0,50      | 0,10-0,35 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        | ●       |       |       |
|                                                                                   | DNMG150604-SF  | 0,4 | 0,05-0,50      | 0,05-0,25 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        | ●       |       |       |
|                                                                                   | DNMG150608-SF  | 0,8 | 0,05-0,50      | 0,10-0,35 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        | ●       |       |       |
|                                                                                   |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        | ●       |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

E

Indice

| Portautensile |         |         |         |            |              |              |
|---------------|---------|---------|---------|------------|--------------|--------------|
| DDJNR/L       | PDJNR/L | PDNNR/L | MDJNR/L | MDPNN      | S***-PDSNR/L | A***-PDUNR/L |
| Kr: 93°       | Kr: 93° | Kr: 63° | Kr: 93° | Kr: 62°30' | Kr: 62°30'   | Kr: 93°      |
|               |         |         |         |            |              |              |
| A231          | A240    | A241    | A254    | A255       | A326         | A327         |

Codice sistema > A48

Scelta gradi > A42

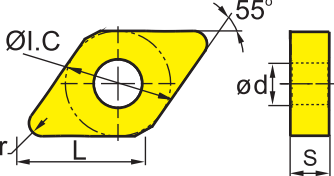
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Dati di taglio > A366

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DNMG  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 11 04 | 11,6 | 9,525 | 4,76 | 3,81 |
| 15 06 | 15,5 | 12,7  | 6,35 | 5,16 |

| DN** Inserti negativi                                                                                                   |               |     |         |          | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|-------------------------------------------------------------------------------------------------------------------------|---------------|-----|---------|----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                                        |               |     |         |          | P                     | ●              | ● | ●      | ●      | ●      |        |        |        |        |                       |        | ●      | ●      |         | ●      | ●               |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                         |               |     |         |          | M                     |                |   |        |        |        | ●      | ●      |        |        |                       |        | ●      | ●      | ●       | ●      | ●               | ●      | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                                                         |               |     |         |          | K                     |                |   |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                         |               |     |         |          | N                     |                |   |        |        |        |        |        |        |        |                       |        | ●      | ●      |         |        |                 |        |        |        |        | ●      | ●      |        |         |       |       |
|                                                                                                                         |               |     |         |          | S                     |                |   |        |        |        |        |        |        |        |                       |        |        | ●      | ●       | ●      | ●               | ●      | ●      |        |        |        | ●      | ●      |         |       |       |
|                                                                                                                         |               |     |         |          | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                                     |               |     |         |          | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>XF</div>                          | DNMG110404-XF | 0,4 | 0,5-2,0 | 0,1-0,25 | ●                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                         | DNMG110408-XF | 0,8 | 0,5-2,0 | 0,1-0,30 | ○                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                         | DNMG150604-XF | 0,4 | 0,5-2,5 | 0,1-0,25 | ●                     |                |   |        |        |        | ●      |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                         | DNMG150608-XF | 0,8 | 0,5-2,5 | 0,1-0,30 | ●                     |                |   |        |        |        | ●      |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                         | DNMG150612-XF | 1,2 | 0,5-2,5 | 0,1-0,35 | ●                     |                |   |        |        |        | ●      |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| <div>XM</div>  <div>Media Lavor.</div> | DNMG110404-XM | 0,4 | 1-3,85  | 0,2-0,4  | ●                     |                |   | ○      |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                         | DNMG110408-XM | 0,8 | 1-3,85  | 0,2-0,4  | ●                     |                |   | ○      |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                         | DNMG110412-XM | 1,2 | 1-3,85  | 0,2-0,6  | ●                     |                |   | ○      |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                         | DNMG150604-XM | 0,4 | 1-5,25  | 0,2-0,4  | ●                     |                |   | ●      |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                         | DNMG150608-XM | 0,8 | 1-5,25  | 0,2-0,4  | ●                     |                |   | ●      |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                         | DNMG150612-XM | 1,2 | 1-5,25  | 0,2-0,6  | ●                     |                |   | ●      |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                         | DNMG150616-XM | 1,6 | 1-5,25  | 0,2-0,65 | ●                     |                |   | ●      |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile |         |         |         |            |              |              |
|---------------|---------|---------|---------|------------|--------------|--------------|
| DDJNR/L       | PDJNR/L | PDNNR/L | MDJNR/L | MDPNN      | S***-PDSNR/L | A***-PDUNR/L |
| Kr: 93°       | Kr: 93° | Kr: 63° | Kr: 93° | Kr: 62°30' | Kr: 62°30'   | Kr: 93°      |
|               |         |         |         |            |              |              |
| A231          | A240    | A241    | A254    | A255       | A326         | A327         |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

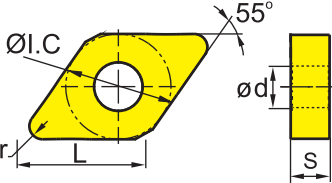
E

Indice

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DNMG  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 11 04 | 11,6 | 9,525 | 4,76 | 3,81 |
| 15 04 | 15,5 | 12,7  | 4,76 | 5,16 |
| 15 06 | 15,5 | 12,7  | 6,35 | 5,16 |

| DN** Inserti negativi                                                                                                     |               |     |           | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        | HT     | HC <sup>2</sup> | HW      |        |        |        |        |        |        |        |        |        |         |       |       |
|---------------------------------------------------------------------------------------------------------------------------|---------------|-----|-----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|-----------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                                          |               |     |           | P                     |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           |               |     |           | M                     |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           |               |     |           | K                     |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           |               |     |           | N                     |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           |               |     |           | S                     |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           |               |     |           | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                                       |               |     |           | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152          | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>DM</div>  <div>Media Lavor.</div>   | DNMG110404-DM | 0,4 | 0,4-5,0   | 0,1-0,3               |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG110408-DM | 0,8 | 0,5-5,0   | 0,15-0,50             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG110412-DM | 1,2 | 0,8-5,0   | 0,18-0,50             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150404-DM | 0,4 | 0,4-6,0   | 0,1-0,3               |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150408-DM | 0,8 | 0,5-6,0   | 0,15-0,50             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150412-DM | 1,2 | 0,8-6,0   | 0,18-0,60             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150604-DM | 0,4 | 1-6       | 0,23-0,65             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150608-DM | 0,8 | 0,5-6,0   | 0,15-0,50             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150612-DM | 1,2 | 0,8-6,0   | 0,18-0,60             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150616-DM | 1,6 | 1-6       | 0,23-0,65             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
| <div>PM</div>  <div>Media Lavor.</div> | DNMG110404-PM | 0,4 | 0,4-5,0   | 0,1-0,3               |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG110408-PM | 0,8 | 0,5-5,0   | 0,15-0,50             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG110412-PM | 1,2 | 0,8-5,0   | 0,18-0,50             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150404-PM | 0,4 | 0,4-6,0   | 0,1-0,3               |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150408-PM | 0,8 | 0,5-6,0   | 0,15-0,50             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150412-PM | 1,2 | 0,8-6,0   | 0,18-0,60             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150416-PM | 1,6 | 1-6       | 0,23-0,65             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150604-PM | 0,4 | 0,4-6,0   | 0,1-0,3               |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150608-PM | 0,8 | 0,5-6,0   | 0,15-0,50             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | DNMG150612-PM | 1,2 | 0,8-6,0   | 0,18-0,60             |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
| DNMG150616-PM                                                                                                             | 1,6           | 1-6 | 0,23-0,65 |                       |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |         |         |            |              |              |
|---------------|---------|---------|---------|------------|--------------|--------------|
| DDJNR/L       | PDJNR/L | PDNNR/L | MDJNR/L | MDPNN      | S***-PDSNR/L | A***-PDUNR/L |
| Kr: 93°       | Kr: 93° | Kr: 63° | Kr: 93° | Kr: 62°30' | Kr: 62°30'   | Kr: 93°      |
|               |         |         |         |            |              |              |
| A231          | A240    | A241    | A254    | A255       | A326         | A327         |

Codice sistema > A48

Scelta gradi > A42

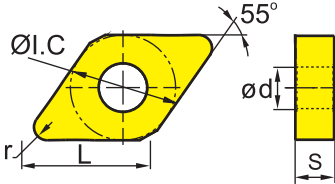
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

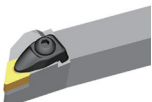
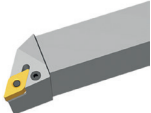
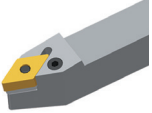
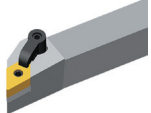
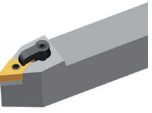
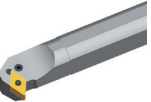
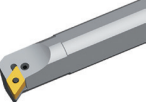
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DNMG  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 15 06 | 15,5 | 12,7 | 6,35 | 5,16 |

| DN** Inserti negativi                                                             |               |                |         | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|---------------|----------------|---------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |               |                |         | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        | ●                     | ●       | ●      | ●               |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |                |         | M                     |        |        |        |        |        | ●      | ●      |        |        | ●                     | ●       | ●      | ●               | ●      | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                   |               |                |         | K                     |        |        |        |        |        |        |        | ●      | ●      | ●                     | ●       |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |                |         | N                     |        |        |        |        |        |        |        |        |        |                       | ●       | ●      |                 |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                   |               |                |         | S                     |        |        |        |        |        |        |        |        |        |                       |         | ●      | ●               | ●      | ●      | ●      | ●      |        |        |        |         |       |       |
|                                                                                   |               |                |         | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                               | r             | a <sub>p</sub> | f       | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| ZM                                                                                | DNMG150612-ZM | 1,2            | 1,0-5,5 | 0,15-0,60             | ○      |        |        | ●      |        |        |        |        |        |                       |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| Media Lavor.                                                                      |               |                |         |                       |        |        |        |        |        |        |        |        |        |                       |         |        |                 |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DDJNR/L                                                                             | PDJNR/L                                                                             | PDNNR/L                                                                             | MDJNR/L                                                                             | MDPNN                                                                                | S***-PDSNR/L                                                                          | S***-PDUNR/L                                                                          |
| Kr: 93°                                                                             | Kr: 93°                                                                             | Kr: 63°                                                                             | Kr: 93°                                                                             | Kr: 62°30'                                                                           | Kr: 62°30'                                                                            | Kr: 93°                                                                               |
|  |  |  |  |  |  |  |
| A231                                                                                | A240                                                                                | A241                                                                                | A254                                                                                | A255                                                                                 | A326                                                                                  | A327                                                                                  |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

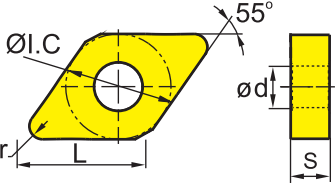
E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DN**  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 11 04 | 11,6 | 9,525 | 4,76 | 3,81 |
| 15 04 | 15,5 | 12,7  | 4,76 | 5,16 |
| 15 06 | 15,5 | 12,7  | 6,35 | 5,16 |

## Inserti - Tornitura

| DN** Inserti negativi                                                                           |                |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |         |       |       |
|-------------------------------------------------------------------------------------------------|----------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                |                |     |                |           | P                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                 |                |     |                |           | M                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                 |                |     |                |           | K                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                 |                |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                 |                |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                 |                |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                                                                                             |                | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Finitura   | DNMG110404-EF  | 0,4 | 0,1-1,5        | 0,05-0,20 |                       |        |        |        |        |        | ○      |        |        |        |                       |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                                 | DNMG110408-EF  | 0,8 | 0,1-1,5        | 0,1-0,4   |                       |        |        |        |        |        | ○      |        |        |        |                       |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                                 | DNMG150404-EF  | 0,4 | 0,1-1,5        | 0,05-0,30 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                                 | DNMG150408-EF  | 0,8 | 0,1-1,5        | 0,1-0,4   |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                                 | DNMG150604-EF  | 0,4 | 0,1-1,5        | 0,05-0,30 |                       |        |        |        |        |        | ●      |        |        |        |                       |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                                 | DNMG150608-EF  | 0,8 | 0,1-1,5        | 0,1-0,4   |                       |        |        |        |        |        | ●      |        |        |        |                       |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                                 | DNMG150612-EF  | 1,2 | 0,1-1,5        | 0,15-0,50 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
| <br>Finitura | DNMG150604L-FM | 0,4 | 0,5-3,0        | 0,05-0,30 |                       |        |        |        |        | ●      |        |        |        |        |                       |         |        |        | ●               |        |        |        |        |        |        |         |       |       |
|                                                                                                 | DNMG150604R-FM | 0,4 | 0,5-3,0        | 0,05-0,30 |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        | ●               |        |        |        |        |        |        |         |       |       |
|                                                                                                 | DNMG150608L-FM | 0,8 | 0,5-3,0        | 0,1-0,5   |                       |        | ○      |        | ●      |        |        |        |        |        |                       |         |        |        | ●               |        |        |        |        |        |        |         |       |       |
|                                                                                                 | DNMG150608R-FM | 0,8 | 0,5-3,0        | 0,1-0,5   |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        | ●               |        |        |        |        |        |        |         |       |       |
| <br>Finitura | DNEG150404-NF  | 0,4 | 0,2-3,0        | 0,05-0,30 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        | ○               |        |        |        |        |        |        |         | ○     |       |
|                                                                                                 | DNEG150408-NF  | 0,8 | 0,2-3,0        | 0,1-0,4   |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        | ○               |        |        |        |        |        |        |         |       |       |
|                                                                                                 | DNEG150604-NF  | 0,4 | 0,2-3,0        | 0,05-0,30 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        | ○               | ●      |        |        |        |        |        |         | ○     |       |
|                                                                                                 | DNEG150608-NF  | 0,8 | 0,2-3,0        | 0,1-0,4   |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        | ○               | ●      |        |        |        |        |        |         | ○     |       |
| <br>Finitura | DNEG150608-NGF | 0,8 | 0,2-3,0        | 0,05-0,40 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        | ●               |        |        |        |        |        |        |         |       |       |
|                                                                                                 | DNEG150612-NGF | 1,2 | 0,2-3,0        | 0,1-0,5   |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        | ●               |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |         |         |            |              |              |
|---------------|---------|---------|---------|------------|--------------|--------------|
| DDJNR/L       | PDJNR/L | PDNNR/L | MDJNR/L | MDPNN      | S***-PDSNR/L | A***-PDUNR/L |
| Kr: 93°       | Kr: 93° | Kr: 63° | Kr: 93° | Kr: 62°30' | Kr: 62°30'   | Kr: 93°      |
|               |         |         |         |            |              |              |
| A231          | A240    | A241    | A254    | A255       | A326         | A327         |

Codice sistema > A48

Scelta gradi > A42

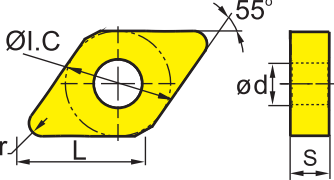
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DNMG  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 11 04 | 11,6 | 9,525 | 4,76 | 3,81 |
| 15 04 | 15,5 | 12,7  | 4,76 | 5,16 |
| 15 06 | 15,5 | 12,7  | 6,35 | 5,16 |

| DN** Inserti negativi                                                                     |               |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |         |       |       |
|-------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|          |               |     |                | P                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |                | M                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |                | K                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |                | N                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |                | S                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |                | H                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                                                                                       |               | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YBD315                | YBD152 | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>EG   | DNMG150604-EG | 0,4 | 1-3            | 0,05-0,30             |        |        |        |        |        |        | ●      |        |        |                       |        |         |        |        |                 |        | ●      |        |        |        |        |         |       |       |
|                                                                                           | DNMG150608-EG | 0,8 | 1-3            | 0,1-0,4               |        |        |        |        |        |        | ●      | ○      |        |                       |        |         |        |        |                 |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                           | DNMG150612-EG | 1,2 | 1-3            | 0,2-0,6               |        |        |        |        |        |        | ●      | ●      |        |                       |        |         |        |        |                 |        | ●      | ●      |        |        |        |         |       |       |
| Media Lavor.                                                                              |               |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| <br>EM | DNMG110404-EM | 0,4 | 0,5-4,4        | 0,05-0,30             |        |        |        |        |        |        | ●      |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                           | DNMG110408-EM | 0,8 | 0,5-4,4        | 0,10-0,45             |        |        |        |        |        |        | ●      |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                           | DNMG150404-EM | 0,4 | 0,5-6,4        | 0,05-0,30             |        |        |        |        |        |        | ○      |        |        |                       |        |         |        |        |                 |        | ○      |        |        |        |        |         |       |       |
|                                                                                           | DNMG150408-EM | 0,8 | 0,5-6,4        | 0,10-0,45             |        |        |        |        |        |        | ○      |        |        |                       |        |         |        |        |                 |        | ●      |        |        |        |        |         |       |       |
|                                                                                           | DNMG150412-EM | 1,2 | 0,5-6,4        | 0,1-0,6               |        |        |        |        |        |        | ○      |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                           | DNMG150604-EM | 0,4 | 0,2-6,4        | 0,05-0,30             |        |        |        |        |        |        | ●      | ●      |        |                       |        |         |        |        |                 |        | ●      |        |        |        |        |         |       |       |
|                                                                                           | DNMG150608-EM | 0,8 | 0,5-6,4        | 0,10-0,45             |        |        |        |        |        |        | ●      | ●      |        |                       |        |         |        |        |                 |        | ●      |        |        |        |        |         |       |       |
|                                                                                           | DNMG150612-EM | 1,2 | 0,5-6,4        | 0,1-0,6               |        |        |        |        |        |        | ●      | ●      |        |                       |        |         |        |        |                 |        | ●      |        |        |        |        |         |       |       |
| Media Lavor.                                                                              |               |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| <br>NM | DNMG150412-NM | 1,2 | 0,2-4,0        | 0,2-0,6               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 | ○      |        |        |        |        |        |         |       |       |
|                                                                                           | DNMG150608-NM | 0,8 | 0,2-4,0        | 0,1-0,4               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                           | DNMG150612-NM | 1,2 | 0,2-4,0        | 0,2-0,6               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 | ○      | ●      |        |        |        |        |         |       |       |
| Media Lavor.                                                                              |               |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| <br>TC | DNMG150608-TC | 0,8 | 0,5-5,0        | 0,15-0,40             |        |        |        |        |        |        |        |        | ●      |                       | ●      |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                           | DNMG150612-TC | 1,2 | 0,5-5,0        | 0,2-0,6               |        |        |        |        |        |        |        |        | ●      |                       | ○      |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| Media Lavor.                                                                              |               |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |         |         |            |              |              |
|---------------|---------|---------|---------|------------|--------------|--------------|
| DDJNR/L       | PDJNR/L | PDNNR/L | MDJNR/L | MDPNN      | S***-PDSNR/L | A***-PDUNR/L |
| Kr: 93°       | Kr: 93° | Kr: 63° | Kr: 93° | Kr: 62°30' | Kr: 62°30'   | Kr: 93°      |
|               |         |         |         |            |              |              |
| A231          | A240    | A241    | A254    | A255       | A326         | A327         |

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366



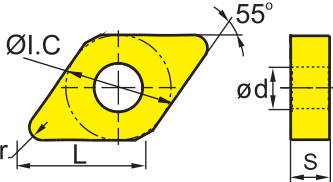
A

Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DNMG  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 15 06 | 15,5 | 12,7 | 6,35 | 5,16 |

| DN** Inserti negativi                                                                      |                |     |                |           | HC <sup>1</sup> (CVD) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | HC <sup>1</sup> (PVD)                                                               |                                                                                     |                                                                                     |                                                                                     | HT                                                                                  | HC <sup>2</sup>                                                                     | HW                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |         |       |       |
|--------------------------------------------------------------------------------------------|----------------|-----|----------------|-----------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|--------|---------|-------|-------|
|           |                |     |                |           | P                     |  |  |  |  |  |                                                                                   |                                                                                   |                                                                                     |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |         |       |       |
|                                                                                            |                |     |                |           | M                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |                                                                                   |                                                                                     |                                                                                     |  |  |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |        |        |         |       |       |
|                                                                                            |                |     |                |           | K                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |         |       |       |
|                                                                                            |                |     |                |           | N                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |  |                                                                                     |                                                                                     |                                                                                     |  |  |                                                                                     |        |        |         |       |       |
|                                                                                            |                |     |                |           | S                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |                                                                                     |  |  |        |        |         |       |       |
|                                                                                            |                |     |                |           | H                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |         |       |       |
| ISO                                                                                        |                | r   | a <sub>p</sub> | f         | YBC103                | YB6315                                                                            | YBC152                                                                            | YBC203                                                                            | YBC252                                                                            | YBC352                                                                            | YBM153                                                                            | YBM253                                                                            | YBD102                                                                              | YB7315                                                                              | YBD152                                                                              | YBD152C                                                                             | YBG101                                                                              | YBG102                                                                              | YBG105                                                                              | YBG205                                                                              | YB9320                                                                              | YPD201                                                                              | YBS103                                                                              | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>TK    | DNMG150608-TK  | 0,8 | 0,2-0,4        | 0,2-0,4   |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |         |       |       |
|                                                                                            | DNMG150612-TK  | 1,2 | 0,2-0,4        | 0,2-0,45  |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |         |       |       |
| Media Lavor.                                                                               |                |     |                |           |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |         |       |       |
| <br>DR    | DNMG150608-DR  | 0,8 | 1-6            | 0,2-0,5   |                       |                                                                                   | ●                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   | ●                                                                                   |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |         |       |       |
|                                                                                            | DNMG150612-DR  | 1,2 | 1-6            | 0,25-0,70 |                       |                                                                                   | ●                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   | ●                                                                                   |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |         |       |       |
|                                                                                            | DNMG150616-DR  | 1,6 | 1-6            | 0,32-0,75 |                       |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | ●                                                                                   |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |         |       |       |
| Sgrossatura                                                                                |                |     |                |           |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |         |       |       |
| <br>SNR | DNMG150608-SNR | 0,8 | 0,2-6,0        | 0,1-0,5   |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     | ○                                                                                   | ●                                                                                   |                                                                                     |                                                                                     |        |        |         |       |       |
|                                                                                            | DNMG150612-SNR | 1,2 | 0,2-6,0        | 0,2-0,6   |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     | ○                                                                                   | ●                                                                                   |                                                                                     |                                                                                     |        |        |         |       |       |
| Sgrossatura                                                                                |                |     |                |           |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

| Portautensile |         |         |         |            |              |              |
|---------------|---------|---------|---------|------------|--------------|--------------|
| DDJNR/L       | PDJNR/L | PDNNR/L | MDJNR/L | MDPNN      | S***-PDSNR/L | S***-PDUNR/L |
| Kr: 93°       | Kr: 93° | Kr: 63° | Kr: 93° | Kr: 62°30' | Kr: 62°30'   | Kr: 93°      |
|               |         |         |         |            |              |              |
| A231          | A240    | A241    | A254    | A255       | A326         | A327         |

E

Indice

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

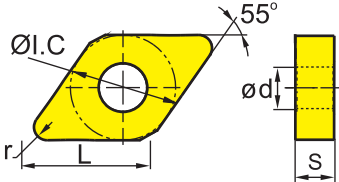
Dati di taglio > A366



## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DN**  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 15 06 | 15,5 | 12,7 | 6,35 | 5,16 |

| DN** Inserti negativi                                                                     |               |     |         |           | HC <sup>1</sup> (CVD) |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                            |        | HC <sup>1</sup> (PVD)                                                                                                                                                   |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                         | HT                                                                                  | HC <sup>2</sup> | HW      |        |        |                                                                                                                                                                         |        |        |        |        |        |        |         |       |       |
|-------------------------------------------------------------------------------------------|---------------|-----|---------|-----------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|---------|--------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|          |               |     |         |           | P                     |      |   |        |        |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                            |        |   |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |                 |         |        |        |                                                                                                                                                                         |        |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |         |           | M                     |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |   |                                                                                                                                                                                                                                                                                                                                            |        |                                                                                                                                                                         |                                                                                                                                                                         |       |   |  |                 |         |        |        |                                                                                                                                                                         |        |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |         |           | K                     |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |                                                                                                                                                                     |     |        |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |                 |         |        |        |                                                                                                                                                                         |        |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |         |           | N                     |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                            |        |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                         |                                                                                     |                 |         |        |        |   |        |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |         |           | S                     |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                            |        |                                                                                                                                                                         |                                                                                                                                                                         |       |                                                                                                                                                                         |                                                                                     |                 |         |        |        |   |        |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |         |           | H                     |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                            |        |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |                 |         |        |        |                                                                                                                                                                         |        |        |        |        |        |        |         |       |       |
| ISO                                                                                       |               |     |         |           | r                     | a <sub>p</sub>                                                                                                                                                                                                                                                                                                                                                                                                            | f | YBC103 | YB6315 | YBC152                                                                                                                                                              | YBC203                                                                                                                                                                                                                                                                                                                                     | YBC252 | YBC352                                                                                                                                                                  | YBM153                                                                                                                                                                  | YBM253                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | YBD102                                                                                                                                                                  | YB7315                                                                              | YBD152          | YBD152C | YBG101 | YBG102 | YBG105                                                                                                                                                                  | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Flat | DNMA150604    | 0,4 | 0,2-6,0 | 0,1-0,3   |                       |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                            |        |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ●                                                                                                                                                                       | ○                                                                                   |                 |         |        |        |                                                                                                                                                                         |        |        |        |        |        |        |         |       |       |
|                                                                                           | DNMA150608    | 0,8 | 0,2-6,0 | 0,1-0,6   |                       |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                            |        |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ●                                                                                                                                                                       | ●                                                                                   |                 |         |        |        |                                                                                                                                                                         |        |        |        |        |        |        |         |       |       |
|                                                                                           | DNMA150612    | 1,2 | 0,2-6,0 | 0,15-0,70 |                       |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                            |        |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ●                                                                                                                                                                       | ●                                                                                   |                 |         |        |        |                                                                                                                                                                         |        |        |        |        |        |        |         |       |       |
|                                                                                           | DNMA150616    | 1,6 | 0,2-6,0 | 0,2-0,8   |                       |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                            |        |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     | ○               |         |        |        |                                                                                                                                                                         |        |        |        |        |        |        |         |       |       |
| Media Lavor.                                                                              |               |     |         |           |                       |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                            |        |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |                 |         |        |        |                                                                                                                                                                         |        |        |        |        |        |        |         |       |       |
| <br>ER   | DNMG150608-ER | 0,8 | 2-6     | 0,15-0,55 |                       |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                            |        |                                                                                                                                                                         |                                                                                                                                                                         | ○                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                         |                                                                                     |                 |         |        |        |                                                                                                                                                                         |        |        |        |        |        |        |         |       |       |
|                                                                                           | DNMG150612-ER | 1,2 | 2-6     | 0,25-0,80 |                       |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                            |        |                                                                                                                                                                         |                                                                                                                                                                         | ○                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                         |                                                                                     |                 |         |        |        |                                                                                                                                                                         |        |        |        |        |        |        |         |       |       |
| Sgrossatura                                                                               |               |     |         |           |                       |                                                                                                                                                                                                                                                                                                                                                                                                                           |   |        |        |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                            |        |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |                 |         |        |        |                                                                                                                                                                         |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |         |         |            |              |              |
|---------------|---------|---------|---------|------------|--------------|--------------|
| DDJNR/L       | PDJNR/L | PDNNR/L | MDJNR/L | MDPNN      | S***-PDSNR/L | S***-PDUNR/L |
| Kr: 93°       | Kr: 93° | Kr: 63° | Kr: 93° | Kr: 62°30' | Kr: 62°30'   | Kr: 93°      |
|               |         |         |         |            |              |              |
| A231          | A240    | A241    | A254    | A255       | A326         | A327         |

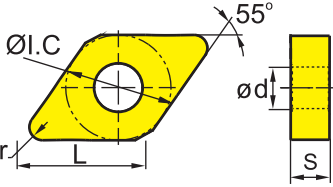
A

Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DNMM  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 15 06 | 15,5 | 12,7 | 6,35 | 5,16 |

| DN** Inserti negativi                                                                              |     |                |                |         | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |  |  |
|----------------------------------------------------------------------------------------------------|-----|----------------|----------------|---------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|--|--|
|                   |     |                |                |         | P                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                                    |     |                |                |         | M                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                                    |     |                |                |         | K                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                                    |     |                |                |         | N                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                                    |     |                |                |         | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                                    |     |                |                |         | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
| ISO                                                                                                |     | r              | a <sub>p</sub> | f       | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |  |  |
| <br>Sgrossatura   | DR  | DNMM150608-DR  | 0,8            | 0,7-6,0 | 0,20-0,55             |        |        | ●      | ●      |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                                    |     | DNMM150612-DR  | 1,2            | 1-6     | 0,25-0,70             |        |        | ●      | ●      | ●      |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                                    |     | DNMM150616-DR  | 1,6            | 1,5-6,0 | 0,32-0,90             |        |        | ●      | ●      |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
| <br>Sgrossatura   | ER  | DNMM150608-ER  | 0,8            | 0,7-6,0 | 0,20-0,55             |        |        |        |        |        | ○      |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                                    |     | DNMM150612-ER  | 1,2            | 1-6     | 0,25-0,70             |        |        |        |        |        |        | ○      |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                                    |     |                |                |         |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
| <br>Sgrossatura | HDR | DNMM150608-HDR | 0,8            | 1-7     | 0,25-0,60             |        |        | ●      | ○      |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                                    |     | DNMM150612-HDR | 1,2            | 1-7     | 0,3-0,8               |        |        | ○      |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                                    |     | DNMM150616-HDR | 1,6            | 1,5-7,0 | 0,4-1,0               |        |        | ○      |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
| <br>Sgrossatura | LR  | DNMM150608-LR  | 0,8            | 2-6     | 0,1-0,6               |        |        | ●      | ●      |        | ●      |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                                    |     | DNMM150612-LR  | 1,2            | 2-6     | 0,2-0,8               |        |        |        | ●      |        | ○      |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                                    |     | DNMM150616-LR  | 1,6            | 2-6     | 0,25-1,00             |        |        | ●      | ●      |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

| Portautensile |         |         |         |            |              |              |
|---------------|---------|---------|---------|------------|--------------|--------------|
| DDJNR/L       | PDJNR/L | PDNNR/L | MDJNR/L | MDPNN      | S***-PDSNR/L | S***-PDUNR/L |
| Kr: 93°       | Kr: 93° | Kr: 63° | Kr: 93° | Kr: 62°30' | Kr: 62°30'   | Kr: 93°      |
|               |         |         |         |            |              |              |
| A231          | A240    | A241    | A254    | A255       | A326         | A327         |

E

Indice

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Scelta gradi > A42

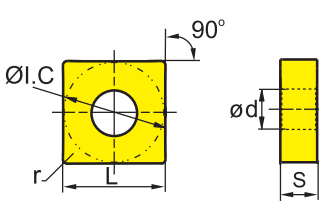
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

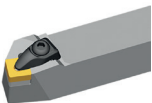
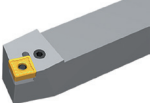
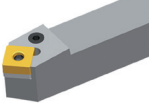
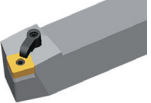
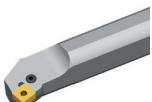
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SNMG  | L     | I.C   | S    | d    |
|-------|-------|-------|------|------|
| 09 03 | 9,525 | 9,525 | 3,18 | 3,81 |
| 12 04 | 12,7  | 12,7  | 4,76 | 5,16 |

| SN** Inserti negativi                                                             |                       |     |           | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        | HC <sup>1</sup> (PVD) | HT     | HC <sup>2</sup> | HW     |
|-----------------------------------------------------------------------------------|-----------------------|-----|-----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|-----------------------|--------|-----------------|--------|
|  |                       |     |           | <b>P</b>              | ●              | ● | ●      | ●      | ●      | ●      |        | ●                     | ●      | ●               |        |
|                                                                                   |                       |     |           | <b>M</b>              |                |   |        |        | ●      | ●      |        | ●                     | ●      | ●               |        |
|                                                                                   |                       |     |           | <b>K</b>              |                |   |        |        | ●      | ●      |        |                       |        |                 |        |
|                                                                                   |                       |     |           | <b>N</b>              |                |   |        |        |        | ●      |        |                       |        |                 | ●      |
|                                                                                   |                       |     |           | <b>S</b>              |                |   |        |        |        | ●      |        |                       |        |                 | ●      |
|                                                                                   |                       |     |           | <b>H</b>              |                |   |        |        |        |        |        |                       |        |                 |        |
| ISO                                                                               |                       |     |           | r                     | a <sub>p</sub> | f | YBC103 | YBC103 | YBC103 | YBC103 | YBC103 | YBC103                | YBC103 | YBC103          | YBC103 |
|                                                                                   |                       |     |           |                       |                |   | YBC103 | YBC103 | YBC103 | YBC103 | YBC103 | YBC103                | YBC103 | YBC103          | YBC103 |
| ADF                                                                               | <b>SNMG120404-ADF</b> | 0,4 | 0,5-5,0   | 0,1-0,3               |                |   | ●      |        |        |        |        | ●                     |        |                 |        |
|                                                                                   | <b>SNMG120408-ADF</b> | 0,8 | 0,5-5,0   | 0,12-0,50             |                |   | ●      |        |        |        |        | ●                     |        |                 |        |
|                                                                                   | <b>SNMG120412-ADF</b> | 1,2 | 1-5       | 0,2-0,6               |                |   | ●      |        |        |        |        | ●                     |        |                 |        |
| Finitura                                                                          |                       |     |           |                       |                |   |        |        |        |        |        |                       |        |                 |        |
| DF                                                                                | <b>SNMG120408-DF</b>  | 0,8 | 0,3-1,5   | 0,1-0,4               |                |   | ●      | ●      |        |        |        |                       |        |                 |        |
|                                                                                   | <b>SNMG120412-DF</b>  | 1,2 | 0,35-1,50 | 0,15-0,50             |                |   | ●      | ●      |        |        |        |                       |        |                 |        |
| Finitura                                                                          |                       |     |           |                       |                |   |        |        |        |        |        |                       |        |                 |        |
| SF                                                                                | <b>SNMG090304-SF</b>  | 0,4 | 0,05-0,50 | 0,05-0,20             |                |   |        |        |        |        |        |                       |        | ●               |        |
|                                                                                   | <b>SNMG090308-SF</b>  | 0,8 | 0,05-0,50 | 0,10-0,35             |                |   |        |        |        |        |        |                       |        | ○               |        |
|                                                                                   | <b>SNMG120404-SF</b>  | 0,4 | 0,05-0,50 | 0,05-0,20             |                |   |        |        |        |        |        |                       |        | ○               |        |
|                                                                                   | <b>SNMG120408-SF</b>  | 0,8 | 0,05-0,50 | 0,10-0,35             |                |   |        |        |        |        |        |                       |        | ○               |        |
| Finitura                                                                          |                       |     |           |                       |                |   |        |        |        |        |        |                       |        |                 |        |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DSBNR/L                                                                             | PSBNR/L                                                                             | PSDNN                                                                               | PSKNR/L                                                                             | PSSNR/L                                                                              | MSBNR/L                                                                               | MSRNR/L                                                                               |
| Kr: 75°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                              | Kr: 75°                                                                               | Kr: 75°                                                                               |
|  |  |  |  |  |  |  |
| A232                                                                                | A242                                                                                | A244                                                                                | A245                                                                                | A246                                                                                 | A256                                                                                  | A257                                                                                  |
| MSKNR/L                                                                             | MSDNN                                                                               | S***-PSKNR/L                                                                        |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |  |  |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A258                                                                                | A259                                                                                | A329                                                                                |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

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A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

E

Indice

## Inserti - Tornitura

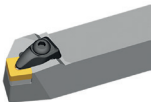
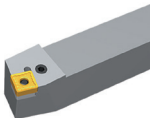
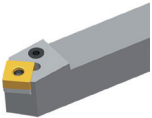
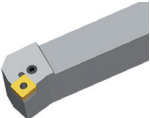
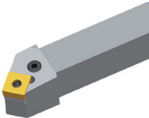
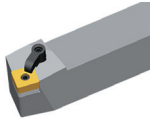
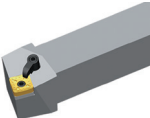
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

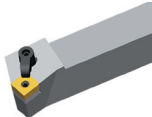
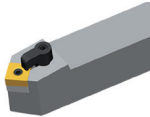
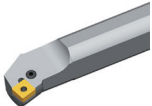
| SNMG  | L      | I.C    | S    | d    |
|-------|--------|--------|------|------|
| 09 03 | 9,525  | 9,525  | 3,18 | 3,81 |
| 12 04 | 12,7   | 12,7   | 4,76 | 5,16 |
| 15 06 | 15,875 | 15,875 | 6,35 | 6,35 |

| SN** Inserti negativi  |               |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |
|------------------------|---------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|
|                        |               |     |                |           | P                     | ●      | ●      | ●      | ●      | ●      |        |        |        |        |                       | ●       | ●      | ●      | ●      |                 |        |        |        |        |        |         |       |       |
|                        |               |     |                |           | M                     |        |        |        |        |        | ●      | ●      |        |        |                       | ●       | ●      | ●      | ●      | ●               | ●      | ●      |        |        |        |         |       |       |
|                        |               |     |                |           | K                     |        |        |        |        |        |        |        | ●      | ●      | ●                     | ●       |        |        |        |                 |        |        |        |        |        |         |       |       |
|                        |               |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       | ●       | ●      |        |        |                 |        |        |        | ●      | ●      |         |       |       |
|                        |               |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        | ●      | ●      | ●               | ●      | ●      |        |        | ●      | ●       |       |       |
|                        |               |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| ISO                    |               | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>EF<br><br>Finitura | SNMG090304-EF | 0,4 | 0,5-2,0        | 0,05-0,30 |                       |        |        |        |        | ●      |        |        |        |        |                       |         |        |        | ●      |                 |        |        |        |        |        |         |       |       |
|                        | SNMG090308-EF | 0,8 | 0,5-2,0        | 0,05-0,40 |                       |        |        |        |        | ●      |        |        |        |        |                       |         |        |        |        | ●               |        |        |        |        |        |         |       |       |
|                        | SNMG090312-EF | 1,2 | 0,5-2,0        | 0,05-0,45 |                       |        |        |        |        | ○      |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                        | SNMG120404-EF | 0,4 | 0,8-3,0        | 0,05-0,30 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        | ●               |        |        |        |        |        |         |       |       |
|                        | SNMG120408-EF | 0,8 | 0,8-3,0        | 0,1-0,4   |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        | ●               |        |        |        |        |        |         |       |       |
|                        | SNMG120412-EF | 1,2 | 0,8-3,0        | 0,15-0,45 |                       |        |        |        |        |        | ○      |        |        |        |                       |         |        |        |        |                 | ●      |        |        |        |        |         |       |       |
|                        | SNMG150608-EF | 0,8 | 1-4            | 0,1-0,4   |                       |        |        |        |        |        | ○      |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                        | SNMG150612-EF | 1,2 | 1-4            | 0,15-0,45 |                       |        |        |        |        |        | ○      |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DSBNR/L                                                                             | PSBNR/L                                                                             | PSDNN                                                                               | PSKNR/L                                                                             | PSSNR/L                                                                              | MSBNR/L                                                                               | MSRNR/L                                                                               |
| Kr: 75°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                              | Kr: 75°                                                                               | Kr: 75°                                                                               |
|  |  |  |  |  |  |  |
| A232                                                                                | A242                                                                                | A244                                                                                | A245                                                                                | A246                                                                                 | A256                                                                                  | A257                                                                                  |

| MSKNR/L                                                                             | MSDNN                                                                               | S***-PSKNR/L                                                                        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             |
|  |  |  |
| A258                                                                                | A259                                                                                | A329                                                                                |

Codice sistema > A48

Scelta gradi > A42

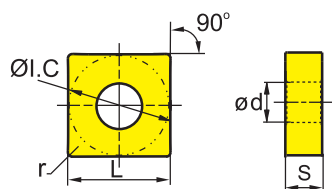
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

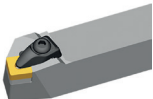
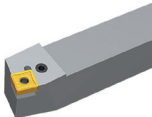
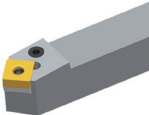
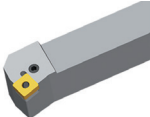
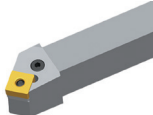
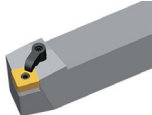
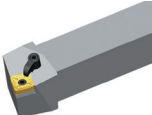
-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

| SNMG         | L      | I.C    | S    | d    |
|--------------|--------|--------|------|------|
| <b>12 04</b> | 12,7   | 12,7   | 4,76 | 5,16 |
| <b>15 06</b> | 15,875 | 15,875 | 6,35 | 6,35 |
| <b>19 06</b> | 19,05  | 19,05  | 6,35 | 7,94 |

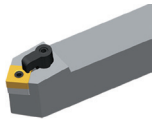
[illegible]

● In magazzino    ○ Su richiesta

|                 |                                 |
|-----------------|---------------------------------|
| HC <sup>1</sup> | Carburo cementato rivestito     |
| HT              | Cermet non rivestito            |
| HC <sup>2</sup> | Cermet rivestito                |
| HW              | Carburo cementato non rivestito |

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>DSBNR/L</b><br>Kr: 75°                                                           | <b>PSBNR/L</b><br>Kr: 75°                                                           | <b>PSDNN</b><br>Kr: 45°                                                             | <b>PSKNR/L</b><br>Kr: 75°                                                           | <b>PSSNR/L</b><br>Kr: 45°                                                            | <b>MSBNR/L</b><br>Kr: 75°                                                             | <b>MSRNR/L</b><br>Kr: 75°                                                             |
|  |  |  |  |  |  |  |
| A232                                                                                | A242                                                                                | A244                                                                                | A245                                                                                | A246                                                                                 | A256                                                                                  | A257                                                                                  |

|                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>MSKNR/L</b><br>Kr: 75°                                                           | <b>MSDNN</b><br>Kr: 45°                                                             | <b>S***-PSKNR/L</b><br>Kr: 75°                                                      |
|  |  |  |
| A258                                                                                | A259                                                                                | A329                                                                                |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

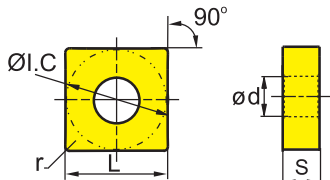
E

Indice

| SNMG  | L      | I.C    | S    | d    |
|-------|--------|--------|------|------|
| 09 03 | 9,525  | 9,525  | 3,18 | 3,81 |
| 12 04 | 12,7   | 12,7   | 4,76 | 5,16 |
| 15 06 | 15,875 | 15,875 | 6,35 | 6,35 |
| 19 06 | 19,05  | 19,05  | 6,35 | 7,94 |

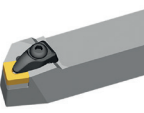
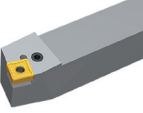
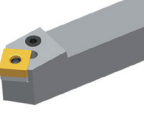
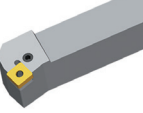
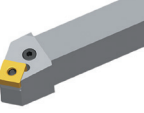
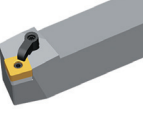
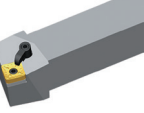
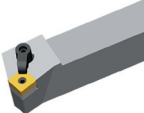
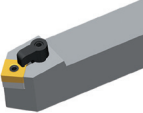
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura

| SN** Inserti negativi                                                                             |               |  |  |     | HC <sup>1</sup> (CVD) |           |           |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |   |  |
|---------------------------------------------------------------------------------------------------|---------------|--|--|-----|-----------------------|-----------|-----------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|---|--|
|                  |               |  |  |     | P                     | ●         | ●         | ●      | ●      | ●      | ●      |        |        |        |                       |        | ●      | ●       |        | ●               | ●      |        |        |        |        |        |        |         |       |       |   |  |
|                                                                                                   |               |  |  |     | M                     |           |           |        |        |        |        | ●      | ●      |        |                       |        | ●      | ●       | ●      | ●               | ●      | ●      | ●      | ●      |        |        |        |         |       |       |   |  |
|                                                                                                   |               |  |  |     | K                     |           |           |        |        |        |        |        |        |        | ●                     | ●      | ●      | ●       |        |                 |        |        |        |        |        |        |        |         |       |       |   |  |
|                                                                                                   |               |  |  |     | N                     |           |           |        |        |        |        |        |        |        |                       |        |        |         | ●      | ●               |        |        |        |        |        |        |        |         | ●     | ●     |   |  |
|                                                                                                   |               |  |  |     | S                     |           |           |        |        |        |        |        |        |        |                       |        |        |         |        |                 | ●      | ●      | ●      | ●      | ●      |        |        |         |       | ●     | ● |  |
|                                                                                                   |               |  |  |     | H                     |           |           |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |   |  |
| ISO                                                                                               |               |  |  | r   | a <sub>p</sub>        | f         | YBC103    | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |   |  |
| <br>Media Lavor. | SNMG090304-PM |  |  |     | 0,4                   | 0,4-4,5   | 0,1-0,3   |        |        |        |        | ○      |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |   |  |
|                                                                                                   | SNMG090308-PM |  |  |     | 0,8                   | 0,5-4,5   | 0,15-0,50 |        |        |        |        | ○      |        |        |                       | ●      |        | ●       |        |                 |        |        |        |        |        |        |        |         |       |       |   |  |
|                                                                                                   | SNMG090312-PM |  |  |     | 1,2                   | 0,6-4,5   | 0,2-0,6   |        |        |        |        | ○      |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |   |  |
|                                                                                                   | SNMG120404-PM |  |  |     | 0,4                   | 0,4-6,0   | 0,1-0,3   |        |        | ●      | ○      |        |        |        |                       |        |        | ○       |        |                 |        |        |        |        |        |        |        |         |       |       |   |  |
|                                                                                                   | SNMG120408-PM |  |  |     | 0,8                   | 0,5-6,0   | 0,15-0,50 |        |        | ●      | ●      |        |        |        |                       | ○      |        | ●       |        |                 |        |        |        |        |        |        |        |         |       |       |   |  |
|                                                                                                   | SNMG120412-PM |  |  |     | 1,2                   | 0,8-6,0   | 0,18-0,60 |        |        | ●      | ●      |        |        |        |                       | ○      |        | ●       |        |                 |        |        |        |        |        |        |        |         |       |       |   |  |
|                                                                                                   | SNMG120416-PM |  |  |     | 1,6                   | 1-6       | 0,23-0,65 |        |        | ○      | ○      |        |        |        |                       | ○      | ○      |         |        |                 |        |        |        |        |        |        |        |         |       |       |   |  |
|                                                                                                   | SNMG150608-PM |  |  |     | 0,8                   | 0,7-7,5   | 0,14-0,50 |        |        | ○      | ○      |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |   |  |
|                                                                                                   | SNMG150612-PM |  |  |     | 1,2                   | 0,8-7,5   | 0,18-0,60 |        |        | ○      | ●      |        |        |        |                       | ●      |        | ●       |        |                 |        |        |        |        |        |        |        |         |       |       |   |  |
| SNMG190612-PM                                                                                     |               |  |  | 1,2 | 1,0-7,5               | 0,20-0,65 |           |        | ○      | ●      |        |        |        |        | ●                     |        | ●      |         |        |                 |        |        |        |        |        |        |        |         |       |       |   |  |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DSBNR/L                                                                             | PSBNR/L                                                                             | PSDNN                                                                               | PSKNR/L                                                                             | PSSNR/L                                                                              | MSBNR/L                                                                               | MSRNR/L                                                                               |
| Kr: 75°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                              | Kr: 75°                                                                               | Kr: 75°                                                                               |
|  |  |  |  |  |  |  |
| A232                                                                                | A242                                                                                | A244                                                                                | A245                                                                                | A246                                                                                 | A256                                                                                  | A257                                                                                  |
| MSKNR/L                                                                             | MSDNN                                                                               | S***-PSKNR/L                                                                        |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |  |  |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A258                                                                                | A259                                                                                | A329                                                                                |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

Codice sistema > A48

Scelta gradi > A42

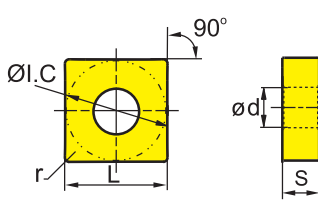
Informazioni tecniche > A501

Dati di taglio > A366

| SNMG  | L      | I.C    | S    | d    |
|-------|--------|--------|------|------|
| 09 03 | 9,525  | 9,525  | 3,18 | 3,81 |
| 12 04 | 12,7   | 12,7   | 4,76 | 5,16 |
| 15 06 | 15,875 | 15,875 | 6,35 | 6,35 |
| 19 06 | 19,05  | 19,05  | 6,35 | 7,94 |

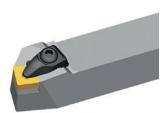
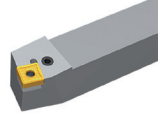
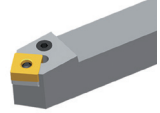
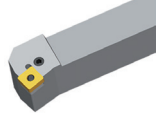
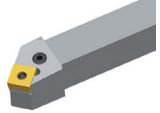
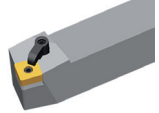
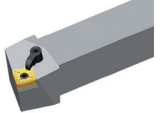
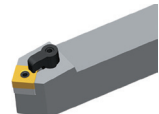
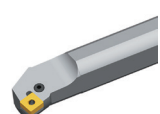
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura

| SN** Inserti negativi                                                                                                     |               |     |         | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |         |       |       |
|---------------------------------------------------------------------------------------------------------------------------|---------------|-----|---------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                                          |               |     |         | P                     | ●              | ● | ●      | ●      | ●      | ●      |        |        |        |        |        | ●                     | ●      |         | ●      | ●      | ●               |        |        |        |        |        |        |         |       |       |
|                                                                                                                           |               |     |         | M                     |                |   |        |        |        | ●      | ●      |        |        |        | ●      | ●                     | ●      | ●       | ●      | ●      | ●               | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                                                           |               |     |         | K                     |                |   |        |        |        |        |        | ●      | ●      | ●      | ●      |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                           |               |     |         | N                     |                |   |        |        |        |        |        |        |        |        |        | ●                     | ●      |         |        |        |                 |        |        |        | ●      | ●      |        |         |       |       |
|                                                                                                                           |               |     |         | S                     |                |   |        |        |        |        |        |        |        |        |        |                       | ●      | ●       | ●      | ●      | ●               | ●      |        |        |        | ●      | ●      |         |       |       |
|                                                                                                                           |               |     |         | H                     |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                                       |               |     |         | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>DM</div>  <div>Media Lavor.</div>   | SNMG090304-DM | 0,4 | 0,4-4,5 | 0,1-0,3               |                |   | ●      |        | ●      |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | SNMG090308-DM | 0,8 | 0,5-4,5 | 0,15-0,50             |                |   | ●      |        | ●      |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | SNMG120404-DM | 0,4 | 0,4-6,0 | 0,1-0,3               |                |   | ●      |        | ●      |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | SNMG120408-DM | 0,8 | 0,5-6,0 | 0,15-0,50             |                |   | ●      |        | ●      |        | ○      |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | SNMG120412-DM | 1,2 | 0,8-6,0 | 0,18-0,60             |                |   | ●      |        | ●      |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | SNMG120416-DM | 1,6 | 1-6     | 0,23-0,65             |                |   |        | ○      |        | ●      |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | SNMG150608-DM | 0,8 | 0,8-7,5 | 0,1-0,5               |                |   | ●      |        | ●      |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | SNMG150612-DM | 1,2 | 0,8-7,5 | 0,18-0,60             |                |   | ●      |        | ●      |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | SNMG190612-DM | 1,2 | 1-9     | 0,18-0,60             |                |   | ●      |        | ●      |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                           | SNMG190616-DM | 1,6 | 1-9     | 0,23-0,65             |                |   |        | ○      |        | ●      |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| <div>EG</div>  <div>Media Lavor.</div> | SNMG120408-EG | 0,8 | 0,5-4,0 | 0,1-0,5               |                |   |        |        |        |        |        |        |        | ●      |        |                       |        |         |        |        | ●               | ●      |        |        |        |        |        |         |       |       |
|                                                                                                                           | SNMG120412-EG | 1,2 | 0,5-4,0 | 0,2-0,6               |                |   |        |        |        |        |        |        |        | ●      |        |                       |        |         |        |        |                 |        | ●      |        |        |        |        |         |       |       |
|                                                                                                                           |               |     |         |                       |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DSBNR/L                                                                             | PSBNR/L                                                                             | PSDNN                                                                               | PSKNR/L                                                                             | PSSNR/L                                                                              | MSBNR/L                                                                               | MSRNR/L                                                                               |
| Kr: 75°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                              | Kr: 75°                                                                               | Kr: 75°                                                                               |
|  |  |  |  |  |  |  |
| A232                                                                                | A242                                                                                | A244                                                                                | A245                                                                                | A246                                                                                 | A256                                                                                  | A257                                                                                  |
| MSKNR/L                                                                             | MSDNN                                                                               | S***-PSKNR/L                                                                        |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |  |  |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A258                                                                                | A259                                                                                | A329                                                                                |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

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Dati di taglio > A366





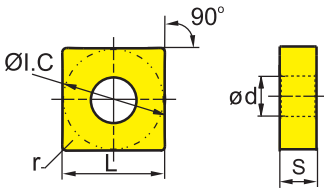
A

Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SNMG  | L      | I.C    | S    | d    |
|-------|--------|--------|------|------|
| 12 04 | 12,7   | 12,7   | 4,76 | 5,16 |
| 15 06 | 15,875 | 15,875 | 6,35 | 6,35 |

| SN** Inserti negativi                                                                               |               |     |                |           | HC <sup>1</sup> (CVD) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |        |                                                                                   | HC <sup>1</sup> (PVD)                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     | HT                                                                                  | HC <sup>2</sup>                                                                     | HW                                                                                  |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
|-----------------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|---------|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|--|
|                    |               |     |                |           | P                     |  |  |  |  |  |  |                                                                                   |        |                                                                                   |                                                                                    |                                                                                     |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
|                                                                                                     |               |     |                |           | M                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |        |                                                                                   |                                                                                    |                                                                                     |                                                                                     |  |  |  |  |  |  |  |        |         |       |                                                                                     |                                                                                     |  |  |
|                                                                                                     |               |     |                |           | K                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |        |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
|                                                                                                     |               |     |                |           | N                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |        |                                                                                   |                                                                                    |                                                                                     |                                                                                     |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |         |       |  |  |  |  |
|                                                                                                     |               |     |                |           | S                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |        |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |                                                                                     |        |         |       |  |  |  |  |
|                                                                                                     |               |     |                |           | H                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |        |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
| ISO                                                                                                 |               | r   | a <sub>p</sub> | f         | YBC103                | YB6315                                                                            | YBC152                                                                            | YBC203                                                                            | YBC252                                                                            | YBC352                                                                            | YBM153                                                                            | YBM253                                                                            | YBD102 | YB7315                                                                            | YBD152                                                                             | YBD152C                                                                             | YBG101                                                                              | YBG102                                                                              | YBG105                                                                              | YBG205                                                                              | YB9320                                                                              | YPD201                                                                              | YBS103                                                                              | YNG151                                                                              | YNT251 | YNG151C | YD101 | YD201                                                                               |                                                                                     |  |  |
| <br>Media Lavor.   | SNMG120404-EM | 0,4 | 0,50-6,35      | 0,05-0,30 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |        |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
|                                                                                                     | SNMG120408-EM | 0,8 | 0,50-6,35      | 0,20-0,45 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 | ●                                                                                 |        |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
|                                                                                                     | SNMG120412-EM | 1,2 | 0,50-6,35      | 0,25-0,60 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 | ●                                                                                 |        |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
|                                                                                                     | SNMG120416-EM | 1,6 | 0,50-6,35      | 0,30-0,75 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ○      |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
|                                                                                                     | SNMG150612-EM | 1,2 | 0,5-8,0        | 0,25-0,60 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ○                                                                                 | ●                                                                                 |        |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
|                                                                                                     | SNMG150616-EM | 1,6 | 0,5-8,0        | 0,30-0,75 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ○      |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
| <br>Media Lavor.  | SNMG120404-TC | 0,4 | 0,5-5,0        | 0,08-0,25 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |        | ●                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
|                                                                                                     | SNMG120408-TC | 0,8 | 0,5-5,0        | 0,15-0,40 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |        | ●                                                                                 |                                                                                    | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
|                                                                                                     | SNMG120412-TC | 1,2 | 0,5-5,0        | 0,2-0,5   |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |        | ●                                                                                 |                                                                                    | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
|                                                                                                     | SNMG150616-TC | 1,6 | 1-7            | 0,2-0,7   |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |        | ●                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
| <br>Media Lavor. | SNMG120412-TK | 1,2 | 0,2-0,4        | 0,2-0,45  |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ●      |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |
|                                                                                                     |               |     |                |           |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |        |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |         |       |                                                                                     |                                                                                     |  |  |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

| Portautensile |         |              |         |         |         |         |
|---------------|---------|--------------|---------|---------|---------|---------|
| DSBNR/L       | PSBNR/L | PSDNN        | PSKNR/L | PSSNR/L | MSBNR/L | MSRNR/L |
| Kr: 75°       | Kr: 75° | Kr: 45°      | Kr: 75° | Kr: 45° | Kr: 75° | Kr: 75° |
|               |         |              |         |         |         |         |
| A232          | A242    | A244         | A245    | A246    | A256    | A257    |
| MSKNR/L       | MSDNN   | S***-PSKNR/L |         |         |         |         |
| Kr: 75°       | Kr: 45° | Kr: 75°      |         |         |         |         |
|               |         |              |         |         |         |         |
| A258          | A259    | A329         |         |         |         |         |

E

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Scelta gradi > A42

Informazioni tecniche > A501

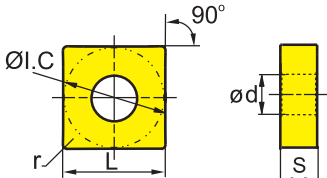
Dati di taglio > A366



## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SNMG  | L      | I.C    | S     | d    |
|-------|--------|--------|-------|------|
| 12 04 | 12,7   | 12,7   | 4,76  | 5,16 |
| 15 06 | 15,875 | 15,875 | 6,35  | 6,35 |
| 19 06 | 19,05  | 19,05  | 6,35  | 7,94 |
| 25 09 | 25,4   | 25,4   | 9,525 | 9,12 |

| SN** Inserti negativi                                                                                    |               |     |          | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |
|----------------------------------------------------------------------------------------------------------|---------------|-----|----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|
|                         |               |     |          | P                     | ●              | ● | ●      | ●      | ●      | ●      |        |        |        |        |        | ●                     | ●      |         | ●      | ●      |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                          |               |     |          | M                     |                |   |        |        |        |        | ●      | ●      |        |        |        | ●                     | ●      | ●       | ●      | ●      | ●      | ●               | ●      |        |        |        |        |         |       |       |
|                                                                                                          |               |     |          | K                     |                |   |        |        |        |        |        |        | ●      | ●      | ●      | ●                     |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                          |               |     |          | N                     |                |   |        |        |        |        |        |        |        |        |        |                       | ●      | ●       |        |        |        |                 |        |        |        | ●      | ●      |         |       |       |
|                                                                                                          |               |     |          | S                     |                |   |        |        |        |        |        |        |        |        |        |                       |        |         | ●      | ●      | ●      | ●               | ●      |        |        |        | ●      | ●       |       |       |
|                                                                                                          |               |     |          | H                     |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| ISO                                                                                                      |               |     |          | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| NM<br><br>Media Lavor.  | SNMG120408-NM | 0,8 | 0,5-5,0  | 0,1-0,4               |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        | ○      | ●      |                 |        |        |        |        |        |         | ○     |       |
|                                                                                                          | SNMG120412-NM | 1,2 | 0,5-5,0  | 0,15-0,50             |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        | ○      |                 |        |        |        |        |        |         |       |       |
|                                                                                                          |               |     |          |                       |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| DR<br><br>Sgrossatura | SNMG120408-DR | 0,8 | 0,7-7,0  | 0,2-0,5               |                | ○ | ●      |        |        |        |        |        |        |        | ●      | ●                     |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                          | SNMG120412-DR | 1,2 | 1-7      | 0,25-0,70             |                | ● | ●      | ●      |        |        |        |        |        |        | ○      | ●                     |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                          | SNMG120416-DR | 1,6 | 1,5-7,0  | 0,32-0,75             |                | ○ | ●      |        |        |        |        |        |        |        | ●      | ●                     |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                          | SNMG150612-DR | 1,2 | 1-8      | 0,25-0,70             |                |   | ●      |        |        |        |        |        |        |        | ○      | ●                     |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                          | SNMG150616-DR | 1,6 | 1,5-8,0  | 0,3-0,8               |                | ○ | ●      |        |        |        |        |        |        |        | ○      | ○                     |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                          | SNMG190612-DR | 1,2 | 1-10     | 0,25-0,70             |                | ● | ●      | ●      |        |        |        |        |        |        |        | ●                     |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                          | SNMG190616-DR | 1,6 | 1,5-10,0 | 0,3-0,8               | ○              | ● | ●      | ●      | ●      |        |        |        |        |        | ○      | ●                     |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                          | SNMG190624-DR | 2,4 | 2-10     | 0,32-0,90             |                |   | ●      | ○      |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                          | SNMG250924-DR | 2,4 | 2-15     | 0,4-1,2               |                |   | ●      | ○      |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile |         |              |         |         |         |         |
|---------------|---------|--------------|---------|---------|---------|---------|
| DSBNN/L       | PSBNN/L | PSDNN        | PSKNR/L | PSSNR/L | MSBNN/L | MSRNN/L |
| Kr: 75°       | Kr: 75° | Kr: 45°      | Kr: 75° | Kr: 45° | Kr: 75° | Kr: 75° |
|               |         |              |         |         |         |         |
| A232          | A242    | A244         | A245    | A246    | A256    | A257    |
| MSKNR/L       | MSDNN   | S***-PSKNR/L |         |         |         |         |
| Kr: 75°       | Kr: 45° | Kr: 75°      |         |         |         |         |
|               |         |              |         |         |         |         |
| A258          | A259    | A329         |         |         |         |         |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

E

Indice

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SNMG  | L      | I.C    | S    | d    |
|-------|--------|--------|------|------|
| 12 04 | 12,7   | 12,7   | 4,76 | 5,16 |
| 15 06 | 15,875 | 15,875 | 6,35 | 6,35 |
| 19 06 | 19,05  | 19,05  | 6,35 | 7,94 |

| SN** Inserti negativi |                |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |
|-----------------------|----------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|
|                       |                |     |                |           | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        | ●                     | ●       | ●      | ●      |        |                 |        |        |        |        |        |         |       |       |
|                       |                |     |                |           | M                     |        |        |        |        |        | ●      | ●      |        |        | ●                     | ●       | ●      | ●      | ●      | ●               |        |        |        |        |        |         |       |       |
|                       |                |     |                |           | K                     |        |        |        |        |        |        |        | ●      | ●      | ●                     | ●       |        |        |        |                 |        |        |        |        |        |         |       |       |
|                       |                |     |                |           | N                     |        |        |        |        |        |        |        |        |        | ●                     | ●       |        |        |        |                 |        | ●      | ●      |        |        |         |       |       |
|                       |                |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         | ●      | ●      | ●      | ●               |        | ●      | ●      |        |        |         |       |       |
|                       |                |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| ISO                   |                | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>ER                | SNMG120408-ER  | 0,8 | 2,0-7,6        | 0,20-0,55 |                       |        |        |        |        |        | ○      | ○      |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                       | SNMG120412-ER  | 1,2 | 2,0-7,6        | 0,3-0,6   |                       |        |        |        |        |        | ○      | ○      |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                       | SNMG150612-ER  | 1,2 | 2,0-9,6        | 0,3-0,6   |                       |        |        |        |        |        | ○      | ○      |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                       | SNMG190612-ER  | 1,2 | 2,0-11,4       | 0,3-0,6   |                       |        |        |        |        |        |        | ○      |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                       | SNMG190616-ER  | 1,6 | 2,0-11,4       | 0,35-0,80 |                       |        |        |        |        |        |        | ○      | ○      |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| <br>SNR               | SNMG120408-SNR | 0,8 | 1-4            | 0,2-0,6   |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        |                 |        |        | ●      |        |        |         |       |       |
|                       |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| Sgrossatura           |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| Sgrossatura           |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |              |         |         |         |         |
|---------------|---------|--------------|---------|---------|---------|---------|
| DSBNR/L       | PSBNR/L | PSDNN        | PSKNR/L | PSSNR/L | MSBNR/L | MSRNR/L |
| Kr: 75°       | Kr: 75° | Kr: 45°      | Kr: 75° | Kr: 45° | Kr: 75° | Kr: 75° |
|               |         |              |         |         |         |         |
| A232          | A242    | A244         | A245    | A246    | A256    | A257    |
| MSKNR/L       | MSDNN   | S***-PSKNR/L |         |         |         |         |
| Kr: 75°       | Kr: 45° | Kr: 75°      |         |         |         |         |
|               |         |              |         |         |         |         |
| A258          | A259    | A329         |         |         |         |         |

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366

| SNMM  | L      | I.C    | S     | d    |
|-------|--------|--------|-------|------|
| 15 06 | 15,875 | 15,875 | 6,35  | 6,35 |
| 19 06 | 19,05  | 19,05  | 6,35  | 7,94 |
| 25 07 | 25,4   | 25,4   | 7,94  | 9,12 |
| 25 09 | 25,4   | 25,4   | 9,525 | 9,12 |

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura

| SN** Inserti negativi                |               |          |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) | HT     | HC <sup>2</sup> | HW      |        |        |        |        |        |        |        |        |        |         |       |       |
|--------------------------------------|---------------|----------|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|-----------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                                      |               |          |                |           | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |                       | ●      | ●               | ●       |        |        |        |        |        |        |        |        |        |         |       |       |
|                                      |               |          |                |           | M                     |        |        |        |        |        | ●      | ●      |                       | ●      | ●               | ●       | ●      | ●      | ●      |        |        |        |        |        |        |         |       |       |
|                                      |               |          |                |           | K                     |        |        |        |        |        |        |        | ●                     | ●      | ●               | ●       |        |        |        |        |        |        |        |        |        |         |       |       |
|                                      |               |          |                |           | N                     |        |        |        |        |        |        |        |                       | ●      | ●               |         |        |        |        | ●      | ●      |        |        |        |        |         |       |       |
|                                      |               |          |                |           | S                     |        |        |        |        |        |        |        |                       |        | ●               | ●       | ●      | ●      | ●      |        | ●      | ●      |        |        |        |         |       |       |
|                                      |               |          |                |           | H                     |        |        |        |        |        |        |        |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                  |               | r        | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152          | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>DR</div> <div>Sgrossatura</div> | SNMM150612-DR | 1,2      | 1-7            | 0,25-0,60 |                       |        |        |        | ●      |        |        |        |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                      | SNMM150616-DR | 1,6      | 1,5-9,0        | 0,32-0,90 |                       |        | ○      |        | ●      | ●      |        |        |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                      | SNMM190608-DR | 0,8      | 2,0-10,5       | 0,25-0,50 |                       |        |        |        | ○      |        |        |        |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                      | SNMM190612-DR | 1,2      | 2,0-10,5       | 0,25-0,60 |                       |        | ●      |        | ●      | ●      |        |        |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                      | SNMM190616-DR | 1,6      | 2,0-10,5       | 0,35-0,90 |                       |        | ●      |        | ●      | ●      |        |        |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                      | SNMM190624-DR | 2,4      | 2,0-10,5       | 0,4-1,1   |                       |        | ●      | ●      | ●      |        |        |        |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                      | SNMM250716-DR | 1,6      | 2,5-12,5       | 0,4-1,0   |                       |        |        |        | ●      |        |        |        |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                      | SNMM250724-DR | 2,4      | 2,5-12,5       | 0,5-1,2   |                       |        | ○      |        | ●      |        |        |        |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
| SNMM250924-DR                        | 2,4           | 2,5-12,5 | 0,5-1,2        |           |                       |        |        | ●      | ●      |        |        |        |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
| <div>ER</div> <div>Sgrossatura</div> | SNMM250724-ER | 2,4      | 2,8-18,0       | 0,45-1,40 |                       |        |        |        | ●      |        | ○      | ●      |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                      | SNMM250732-ER | 3,2      | 2,8-18,0       | 0,32-1,40 |                       |        |        |        | ●      |        |        |        |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                      | SNMM250924-ER | 2,4      | 2,8-18,0       | 0,45-1,40 |                       |        |        |        | ●      | ○      |        | ○      |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                      | SNMM250932-ER | 3,2      | 2,8-18,0       | 0,55-1,80 |                       |        |        |        | ●      |        |        |        |                       |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile |         |         |         |         |         |         |
|---------------|---------|---------|---------|---------|---------|---------|
| DSBNR/L       | PSBNR/L | PSDNN   | PSKNR/L | PSSNR/L | MSBNR/L | MSRNR/L |
| Kr: 75°       | Kr: 75° | Kr: 45° | Kr: 75° | Kr: 45° | Kr: 75° | Kr: 75° |
|               |         |         |         |         |         |         |
| A232          | A242    | A244    | A245    | A246    | A256    | A257    |
| MSKNR/L       | MSDNN   |         |         |         |         |         |
| Kr: 75°       | Kr: 45° |         |         |         |         |         |
|               |         |         |         |         |         |         |
| A258          | A259    |         |         |         |         |         |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

E

Indice

| SNMM  | L      | I.C    | S     | d    |
|-------|--------|--------|-------|------|
| 12 04 | 12,7   | 12,7   | 4,76  | 5,16 |
| 15 06 | 15,875 | 15,875 | 6,35  | 6,35 |
| 19 06 | 19,05  | 19,05  | 6,35  | 7,94 |
| 25 09 | 25,4   | 25,4   | 9,525 | 9,12 |

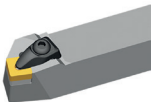
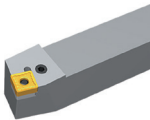
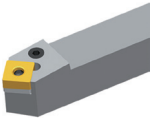
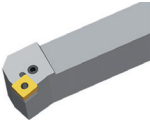
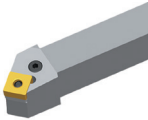
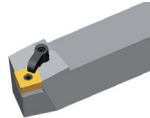
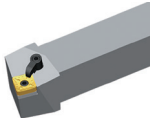
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

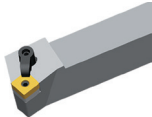
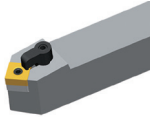
## Inserti - Tornitura

| SN** Inserti negativi                |               |     |          |           | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        | HT      | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |         |       |       |   |  |  |
|--------------------------------------|---------------|-----|----------|-----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|---------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|---|--|--|
|                                      |               |     |          |           | P                     | ●              | ● | ●      | ●      | ●      | ●      |        |        |        |                       | ●      | ●      |        | ●       | ●               | ●      |        |        |        |        |        |        |        |         |       |       |   |  |  |
|                                      |               |     |          |           | M                     |                |   |        |        |        |        | ●      | ●      |        |                       |        |        | ●      | ●       | ●               | ●      | ●      | ●      | ●      | ●      | ●      |        |        |         |       |       |   |  |  |
|                                      |               |     |          |           | K                     |                |   |        |        |        |        |        |        |        | ●                     | ●      | ●      | ●      |         |                 |        |        |        |        |        |        |        |        |         |       |       |   |  |  |
|                                      |               |     |          |           | N                     |                |   |        |        |        |        |        |        |        |                       |        |        | ●      | ●       |                 |        |        |        |        |        |        |        |        |         | ●     | ●     |   |  |  |
|                                      |               |     |          |           | S                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 | ●      | ●      | ●      | ●      | ●      |        |        |        |         |       | ●     | ● |  |  |
|                                      |               |     |          |           | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |   |  |  |
| ISO                                  |               |     |          |           | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C | YBG101          | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |   |  |  |
| <div>LR</div> <div>Sgrossatura</div> | SNMM120408-LR | 0,8 | 1-6      | 0,1-0,5   |                       |                |   |        |        | ○      |        | ●      |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |   |  |  |
|                                      | SNMM120412-LR | 1,2 | 1-6      | 0,2-0,6   |                       |                |   |        |        | ○      |        | ●      |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |   |  |  |
|                                      | SNMM120416-LR | 1,6 | 1-6      | 0,25-0,70 |                       |                |   |        |        |        |        |        | ○      |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |   |  |  |
|                                      | SNMM150612-LR | 1,2 | 1,5-7,0  | 0,1-0,5   |                       |                |   |        |        |        |        |        | ●      |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |   |  |  |
|                                      | SNMM150616-LR | 1,6 | 1,5-7,0  | 0,1-0,5   |                       |                |   |        |        |        | ○      | ○      |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |   |  |  |
|                                      | SNMM190612-LR | 1,2 | 2-10     | 0,25-0,70 |                       |                |   |        |        |        | ○      |        | ●      |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |   |  |  |
|                                      | SNMM190616-LR | 1,6 | 2-10     | 0,3-1,0   |                       |                |   |        |        |        | ○      |        | ●      |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |   |  |  |
|                                      | SNMM190624-LR | 2,4 | 2-10     | 0,3-1,1   |                       |                |   |        |        |        | ○      |        | ●      |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |   |  |  |
|                                      | SNMM250924-LR | 2,4 | 3,0-12,5 | 0,3-1,2   |                       |                |   |        |        |        | ○      |        | ●      | ○      |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |   |  |  |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DSBNR/L                                                                             | PSBNR/L                                                                             | PSDNN                                                                               | PSKNR/L                                                                             | PSSNR/L                                                                              | MSBNR/L                                                                               | MSRNR/L                                                                               |
| Kr: 75°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                              | Kr: 75°                                                                               | Kr: 75°                                                                               |
|  |  |  |  |  |  |  |
| A232                                                                                | A242                                                                                | A244                                                                                | A245                                                                                | A246                                                                                 | A256                                                                                  | A257                                                                                  |

| MSKNR/L                                                                             | MSDNN                                                                               | S***-PSKNR/L                                                                        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             |
|  |  |  |
| A258                                                                                | A259                                                                                | A329                                                                                |

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366

| SNMM  | L      | I.C    | S     | d    |
|-------|--------|--------|-------|------|
| 12 04 | 12,7   | 12,7   | 4,76  | 5,16 |
| 15 06 | 15,875 | 15,875 | 6,35  | 6,35 |
| 19 06 | 19,05  | 19,05  | 6,35  | 7,94 |
| 25 07 | 25,4   | 25,4   | 7,94  | 9,12 |
| 25 09 | 25,4   | 25,4   | 9,525 | 9,12 |

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura

| SN** Inserti negativi                             |                |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |         |       |       |
|---------------------------------------------------|----------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|--------|-----------------|--------|--------|--------|--------|---------|-------|-------|
|                                                   |                |     |                |           | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |                       | ●       | ●      |        | ●      | ●      |                 |        |        |        |        |         |       |       |
|                                                   |                |     |                |           | M                     |        |        |        |        |        | ●      | ●      |        |        |                       |         | ●      | ●      | ●      | ●      | ●               | ●      | ●      |        |        |         |       |       |
|                                                   |                |     |                |           | K                     |        |        |        |        |        |        |        | ●      | ●      | ●                     | ●       |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                   |                |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         | ●      | ●      |        |        |                 |        |        |        | ●      | ●       |       |       |
|                                                   |                |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        | ●      | ●      | ●               | ●      | ●      |        |        | ●       | ●     |       |
|                                                   |                |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| ISO                                               |                | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320          | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>HDR</div> <div></div> <div>Sgrossatura</div> | SNMM120408-HDR | 0,8 | 1-6            | 0,1-0,6   |                       |        |        |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                   | SNMM120412-HDR | 1,2 | 1,5-6,0        | 0,2-0,7   |                       |        |        |        | ○      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                   | SNMM150608-HDR | 0,8 | 1-7            | 0,2-0,6   |                       |        |        |        |        | ○      |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                   | SNMM150612-HDR | 1,2 | 1-7            | 0,25-0,70 |                       | ●      |        | ●      |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                   | SNMM150616-HDR | 1,6 | 1,5-9,0        | 0,32-1,00 |                       |        |        |        | ○      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                   | SNMM190612-HDR | 1,2 | 2,0-10,5       | 0,25-0,70 |                       |        | ○      |        | ○      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                   | SNMM190616-HDR | 1,6 | 2,0-10,5       | 0,35-1,00 |                       | ●      |        | ●      |        |        |        | ○      |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                   | SNMM190624-HDR | 2,4 | 2,0-10,5       | 0,4-1,2   |                       | ●      |        | ●      |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                   | SNMM250724-HDR | 2,4 | 2,5-12,5       | 0,5-1,4   |                       |        |        |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                   | SNMM250924-HDR | 2,4 | 2,5-12,5       | 0,5-1,4   |                       | ●      |        | ●      | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile |         |              |         |         |         |         |
|---------------|---------|--------------|---------|---------|---------|---------|
| DSBNN/L       | PSBNN/L | PSDNN        | PSKNR/L | PSSNR/L | MSBNN/L | MSRNN/L |
| Kr: 75°       | Kr: 75° | Kr: 45°      | Kr: 75° | Kr: 45° | Kr: 75° | Kr: 75° |
|               |         |              |         |         |         |         |
| A232          | A242    | A244         | A245    | A246    | A256    | A257    |
| MSKNR/L       | MSDNN   | S***-PSKNR/L |         |         |         |         |
| Kr: 75°       | Kr: 45° | Kr: 75°      |         |         |         |         |
|               |         |              |         |         |         |         |
| A258          | A259    | A329         |         |         |         |         |

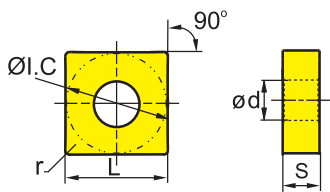
A

Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SNMM  | L     | I.C   | S     | d    |
|-------|-------|-------|-------|------|
| 19 06 | 19,05 | 19,05 | 6,35  | 7,94 |
| 25 09 | 25,4  | 25,4  | 9,525 | 9,12 |

| SN** Inserti negativi                                                                    |                |     |          |           | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |        |         |       |       |
|------------------------------------------------------------------------------------------|----------------|-----|----------|-----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|         |                |     |          |           | P                     | ●              | ● | ●      | ●      | ●      |        |        |        | ●      | ●                     |        | ●      | ●      | ●               |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                          |                |     |          |           | M                     |                |   |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●      | ●      | ●               | ●      | ●      |        |        |        |        |        |        |        |         |       |       |
|                                                                                          |                |     |          |           | K                     |                |   |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                          |                |     |          |           | N                     |                |   |        |        |        |        |        |        |        | ●                     | ●      |        |        |                 |        |        | ●      | ●      |        |        |        |        |        |         |       |       |
|                                                                                          |                |     |          |           | S                     |                |   |        |        |        |        |        |        |        |                       | ●      | ●      | ●      | ●               | ●      |        |        | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                          |                |     |          |           | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                      |                |     |          |           | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C         | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>HPR | SNMM190616-HPR | 1,6 | 2,0-10,5 | 0,35-1,00 |                       |                |   |        |        |        |        | ●      |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                          | SNMM190624-HPR | 2,4 | 2,0-10,5 | 0,4-1,2   |                       |                |   |        | ○      |        | ●      |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                          | SNMM250924-HPR | 2,4 | 2,0-12,5 | 0,5-1,4   |                       |                |   |        | ○      |        | ●      | ●      |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
| Sgrossatura                                                                              |                |     |          |           |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

B

Fresatura

C

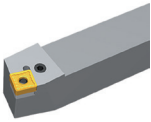
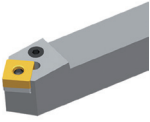
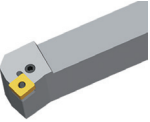
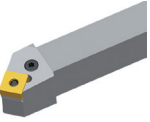
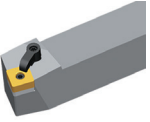
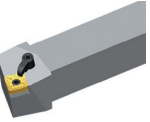
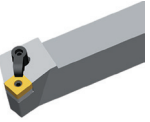
Foratura

D

Informazioni tecniche

E

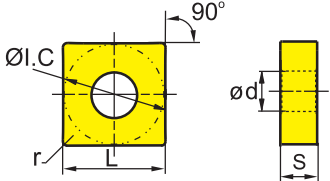
Indice

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| PSBNR/L                                                                             | PSDNN                                                                               | PSKNR/L                                                                             | PSSNR/L                                                                             | MSBNR/L                                                                              | MSRNR/L                                                                               | MSKNR/L                                                                               |
| Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                              | Kr: 75°                                                                               | Kr: 75°                                                                               |
|  |  |  |  |  |  |  |
| A242                                                                                | A244                                                                                | A245                                                                                | A246                                                                                | A256                                                                                 | A257                                                                                  | A258                                                                                  |

## Inserti - Tornitura

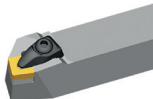
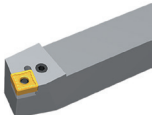
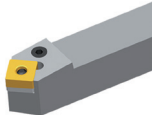
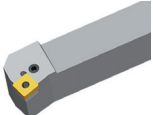
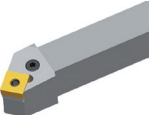
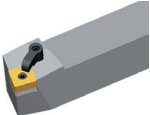
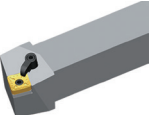
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

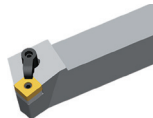
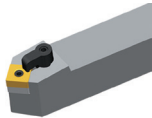
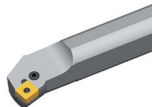
| SNMG  | L    | I.C  | S     | d    |
|-------|------|------|-------|------|
| 12 04 | 12,7 | 12,7 | 4,76  | 5,16 |
| 25 07 | 25,4 | 25,4 | 7,94  | 9,12 |
| 25 09 | 25,4 | 25,4 | 9,525 | 9,12 |

| SN** Inserti negativi                                                             |            |     |         |         | HC <sup>1</sup> (CVD) |   |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |         |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|------------|-----|---------|---------|-----------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |            |     |         | P       | ●                     | ● | ●      | ●      | ●      |        |        |        |        | ●      | ●                     |        | ●      | ●       | ●      |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |     |         | M       |                       |   |        |        |        | ●      | ●      |        |        | ●      | ●                     | ●      | ●      | ●       | ●      | ●      | ●               |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |     |         | K       |                       |   |        |        |        |        |        | ●      | ●      | ●      | ●                     |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |     |         | N       |                       |   |        |        |        |        |        |        |        |        | ●                     | ●      |        |         |        |        |                 |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                   |            |     |         | S       |                       |   |        |        |        |        |        |        |        |        | ●                     | ●      | ●      | ●       | ●      |        |                 |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                   |            |     |         | H       |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                                                                               |            |     |         | r       | a <sub>p</sub>        | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YBD315 | YBD152 | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YBG320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| Basic                                                                             | SNMG120408 | 0,8 | 0,5-6,0 | 0,1-0,6 |                       |   | ●      |        | ●      |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   | SNMG120412 | 1,2 | 0,5-6,0 | 0,1-0,7 |                       |   | ○      |        | ○      |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   | SNMG250724 | 2,4 | 1-9     | 0,1-1,1 |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   | SNMG250924 | 2,4 | 1-9     | 0,1-1,1 |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| Media Lavor.                                                                      |            |     |         |         |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DSBNR/L                                                                             | PSBNR/L                                                                             | PSDNN                                                                               | PSKNR/L                                                                             | PSSNR/L                                                                              | MSBNR/L                                                                               | MSRNR/L                                                                               |
| Kr: 75°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                              | Kr: 75°                                                                               | Kr: 75°                                                                               |
|  |  |  |  |  |  |  |
| A232                                                                                | A242                                                                                | A244                                                                                | A245                                                                                | A246                                                                                 | A256                                                                                  | A257                                                                                  |

| MSKNR/L                                                                             | MSDNN                                                                               | S***-PSKNR/L                                                                        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             |
|  |  |  |
| A258                                                                                | A259                                                                                | A329                                                                                |



A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

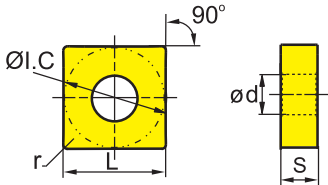
E

Indice

| SN**  | L      | I.C    | S    | d    |
|-------|--------|--------|------|------|
| 12 04 | 12,7   | 12,7   | 4,76 | 5,16 |
| 15 06 | 15,875 | 15,875 | 6,35 | 6,35 |
| 19 06 | 19,05  | 19,05  | 6,35 | 7,94 |
| 25 07 | 25,4   | 25,4   | 7,94 | 9,12 |

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura

| SN** Inserti negativi                                                               |              |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|-------------------------------------------------------------------------------------|--------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|    |              |     |                | P                     | ●      | ●      | ●      | ●      | ●      |        |        |        |        | ●                     | ●      | ●       | ●      |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                     |              |     |                | M                     |        |        |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●       | ●      | ●               | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                     |              |     |                | K                     |        |        |        |        |        |        |        | ●      | ●      | ●                     | ●      |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                     |              |     |                | N                     |        |        |        |        |        |        |        |        |        | ●                     | ●      |         |        |                 |        | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                     |              |     |                | S                     |        |        |        |        |        |        |        |        |        |                       | ●      | ●       | ●      | ●               | ●      |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                     |              |     |                | H                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                 |              | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
|    | SNMA120408   | 0,8 | 0,5-5,0        | 0,1-0,5               |        |        |        |        |        |        |        |        | ●      | ●                     | ●      |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                     | SNMA120412   | 1,2 | 0,5-5,0        | 0,2-0,7               |        |        |        |        |        |        |        |        |        | ○                     | ○      | ●       | ○      |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                     | SNMA120416   | 1,6 | 0,5-5,0        | 0,2-1,0               |        |        |        |        |        |        |        |        |        | ○                     | ●      | ○       |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                     | SNMA150608   | 0,8 | 0,8-7,0        | 0,1-0,5               |        |        |        |        |        |        |        |        |        |                       |        |         | ○      |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                     | SNMA150612   | 1,2 | 0,8-7,0        | 0,2-0,7               |        |        |        |        |        |        |        |        |        |                       |        |         | ●      |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                     | SNMA190612   | 1,2 | 0,8-7,0        | 0,2-0,7               |        |        |        |        |        |        |        |        |        | ○                     | ●      |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                     | SNMA190616   | 1,6 | 0,8-7,0        | 0,3-0,8               |        |        |        |        |        |        |        |        |        | ○                     | ●      |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|  | SNMM250724-1 | 2,4 | 2,0-12,5       | 0,3-1,2               |        |        |        |        | ●      | ●      |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                     |              |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                     |              |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                     |              |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

E

Indice

| Portautensile |         |              |         |         |         |         |
|---------------|---------|--------------|---------|---------|---------|---------|
| DSBNR/L       | PSBNR/L | PSDNN        | PSKNR/L | PSSNR/L | MSBNR/L | MSRNR/L |
| Kr: 75°       | Kr: 75° | Kr: 45°      | Kr: 75° | Kr: 45° | Kr: 75° | Kr: 75° |
|               |         |              |         |         |         |         |
| A232          | A242    | A244         | A245    | A246    | A256    | A257    |
| MSKNR/L       | MSDNN   | S***-PSKNR/L |         |         |         |         |
| Kr: 75°       | Kr: 45° | Kr: 75°      |         |         |         |         |
|               |         |              |         |         |         |         |
| A258          | A259    | A329         |         |         |         |         |

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

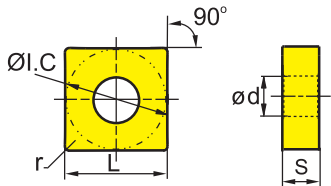
Dati di taglio > A366



## Inserti - Tornitura

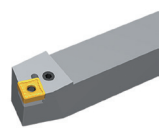
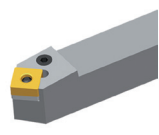
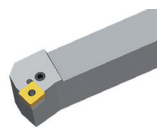
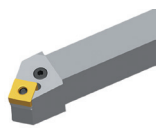
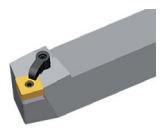
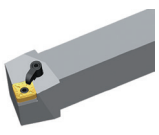
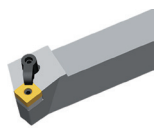
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SNMM  | L     | I.C   | S     | d    |
|-------|-------|-------|-------|------|
| 19 06 | 19,05 | 19,05 | 6,35  | 7,94 |
| 25 09 | 25,4  | 25,4  | 9,525 | 9,12 |

| SN** Inserti negativi                                                                              |            |     |          | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        | HT      | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |         |       |       |
|----------------------------------------------------------------------------------------------------|------------|-----|----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|---------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                   |            |     |          | P                     | ●              | ● | ●      | ●      | ●      | ●      |        |        |        | ●                     | ●      |        | ●      | ●       | ●               |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                    |            |     |          | M                     |                |   |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●      | ●      | ●       | ●               | ●      | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                                    |            |     |          | K                     |                |   |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                    |            |     |          | N                     |                |   |        |        |        |        |        |        |        |                       | ●      | ●      |        |         |                 |        |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                                    |            |     |          | S                     |                |   |        |        |        |        |        |        |        |                       |        | ●      | ●      | ●       | ●               | ●      |        |        |        | ●      | ●      |        |        |         |       |       |
|                                                                                                    |            |     |          | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                |            |     |          | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C | YBG101          | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>Basic</div>  | SNMM190612 | 1,2 | 1,5-10,5 | 0,2-0,7               |                |   |        |        |        |        | ○      |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                    | SNMM190616 | 1,6 | 0,5-10,5 | 0,2-1,0               |                |   |        |        |        |        | ○      |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                    | SNMM250924 | 2,4 | 2,0-12,5 | 0,3-1,2               |                |   |        |        |        |        | ●      |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                    |            |     |          |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| PSBNR/L                                                                             | PSDNN                                                                               | PSKNR/L                                                                             | PSSNR/L                                                                             | MSBNR/L                                                                              | MSRNR/L                                                                               | MSKNR/L                                                                               |
| Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                              | Kr: 75°                                                                               | Kr: 75°                                                                               |
|  |  |  |  |  |  |  |
| A242                                                                                | A244                                                                                | A245                                                                                | A246                                                                                | A256                                                                                 | A257                                                                                  | A258                                                                                  |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

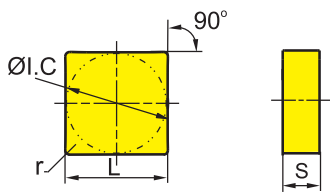
E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SNUN  | L     | I.C   | S    |
|-------|-------|-------|------|
| 12 04 | 12,7  | 12,7  | 4,76 |
| 19 04 | 19,05 | 19,05 | 4,76 |

## Inserti - Tornitura

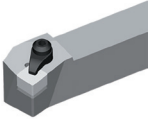
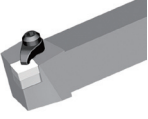
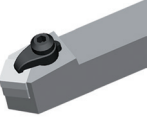
| SN** Inserti negativi                                                             |      |            |     | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        | HT      | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|------|------------|-----|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|---------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |      |            |     | P                     | ●              | ● | ●      | ●      | ●      |        |        |        |        |                       | ●      | ●      |        | ●       | ●               | ●      |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |      |            |     | M                     |                |   |        |        |        | ●      | ●      |        |        |                       | ●      | ●      | ●      | ●       | ●               | ●      | ●      | ●      |        |        |        |        |        |         |       |       |
|                                                                                   |      |            |     | K                     |                |   |        |        |        |        |        |        | ●      | ●                     | ●      | ●      |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |      |            |     | N                     |                |   |        |        |        |        |        |        |        |                       | ●      | ●      |        |         |                 |        |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                   |      |            |     | S                     |                |   |        |        |        |        |        |        |        |                       |        |        | ●      | ●       | ●               | ●      | ●      | ●      |        | ●      |        |        |        |         |       |       |
|                                                                                   |      |            |     | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                               |      |            |     | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C | YBG101          | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
|  | Flat | SNUN120408 | 0,8 | 0,7-6,0               | 0,2-0,5        |   |        |        |        |        |        |        |        |                       |        |        |        | ●       |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |      | SNUN120412 | 1,2 | 0,7-6,0               | 0,25-0,60      |   |        |        |        |        |        |        |        |                       |        | ○      | ○      |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |      | SNUN190412 | 1,2 | 0,9-6,0               | 0,25-0,60      |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         | ○     |       |
|                                                                                   |      |            |     |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

C

Foratura

| Portautensile                                                                       |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| CSKNR/L                                                                             | CSRNR/L                                                                             | CSDNN                                                                               |
| Kr: 75°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                             |
|  |  |  |
| A296                                                                                | A297                                                                                | A299                                                                                |

D

Informazioni tecniche

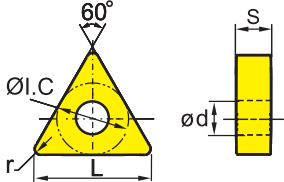
E

Indice

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TN**  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,5 | 9,525 | 4,76 | 3,81 |
| 22 04 | 22   | 12,7  | 4,76 | 5,16 |

| TN** Inserti negativi                                                                                 |                |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|-------------------------------------------------------------------------------------------------------|----------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                      |                |     |                | P                     | ●      | ●      | ●      | ●      | ●      |        |        |                       |        |        | ●      | ●       | ●      | ●               |        |        |        |        |        |        |        |         |       |       |
|                                                                                                       |                |     |                | M                     |        |        |        |        |        | ●      | ●      |                       |        | ●      | ●      | ●       | ●      | ●               | ●      | ●      |        |        |        |        |        |         |       |       |
|                                                                                                       |                |     |                | K                     |        |        |        |        |        |        |        | ●                     | ●      | ●      | ●      |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                       |                |     |                | N                     |        |        |        |        |        |        |        |                       |        |        | ●      | ●       |        |                 |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                                       |                |     |                | S                     |        |        |        |        |        |        |        |                       |        |        |        | ●       | ●      | ●               | ●      | ●      |        | ●      | ●      |        |        |         |       |       |
|                                                                                                       |                |     |                | H                     |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                   |                | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>WG<br>Raschiante | TNMX160408-WG  | 0,8 | 0,5-5,0        | 0,15-0,70             |        | ●      |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                       | TNMX160412-WG  | 1,2 | 0,8-6,0        | 0,20-0,75             |        | ○      |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| <br>ADF<br>Finitura  | TNMG160404-ADF | 0,4 | 0,5-5,0        | 0,05-0,30             |        | ●      |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        | ●      |        |        | ●      |        |         |       |       |
|                                                                                                       | TNMG160408-ADF | 0,8 | 0,5-5,0        | 0,1-0,4               |        | ●      |        |        |        |        |        |                       |        |        |        |         |        |                 |        | ○      | ●      |        |        | ●      |        |         |       |       |
|                                                                                                       | TNMG160412-ADF | 1,2 | 0,5-5,0        | 0,2-0,5               |        | ●      |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        | ●      |        |        |        |        |         |       |       |
|                                                                                                       |                |     |                |                       |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| <br>DF<br>Finitura | TNMG160404-DF  | 0,4 | 0,15-2,00      | 0,08-0,25             |        | ●      |        | ●      |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                       | TNMG160408-DF  | 0,8 | 0,15-2,00      | 0,1-0,3               |        | ●      |        | ●      |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                       | TNMG160412-DF  | 1,2 | 0,35-1,50      | 0,15-0,50             |        | ●      |        | ●      |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                       | TNMG220408-DF  | 0,8 | 0,3-1,5        | 0,1-0,4               |        | ●      |        | ●      |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                       | TNMG220412-DF  | 1,2 | 0,35-1,50      | 0,15-0,50             |        | ●      |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |              |         |         |         |         |         |
|---------------|--------------|---------|---------|---------|---------|---------|
| DTGNR/L       | PTFNR/L      | PTTNR/L | PTGNR/L | MTGNR/L | MTJNR/L | MTJNR/L |
| Kr: 91°       | Kr: 91°      | Kr: 60° | Kr: 90° | Kr: 90° | Kr: 93° | Kr: 93° |
|               |              |         |         |         |         |         |
| A233          | A247         | A248    | A249    | A260    | A261    | A262    |
| MTFNR/L       | S***-PTFNR/L |         |         |         |         |         |
| Kr: 91°       | Kr: 90°      |         |         |         |         |         |
|               |              |         |         |         |         |         |
| A263          | A330         |         |         |         |         |         |

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366



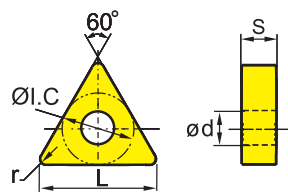
A

Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TNMG  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,5 | 9,525 | 4,76 | 3,81 |

## Inserti - Tornitura

| TN** Inserti negativi                                                             |               |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|---------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |               |     |                | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        | ●                     | ●      | ●       | ●      |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |                | M                     |        |        |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●       | ●      | ●               | ●      | ●      |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |                | K                     |        |        |        |        |        |        |        | ●      | ●      | ●                     | ●      |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |                | N                     |        |        |        |        |        |        |        |        |        | ●                     | ●      |         |        |                 |        | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                   |               |     |                | S                     |        |        |        |        |        |        |        |        |        |                       | ●      | ●       | ●      | ●               | ●      |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                   |               |     |                | H                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                               |               | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| SF                                                                                | TNMG160404-SF | 0,4 | 0,05-1,00      | 0,05-0,30             |        |        |        |        |        |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        | ○      | ●      |         |       |       |
|                                                                                   | TNMG160408-SF | 0,8 | 0,05-1,00      | 0,05-0,40             |        |        |        |        |        |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        | ●      |         |       |       |
| Finitura                                                                          |               |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

B

Fresatura

C

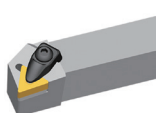
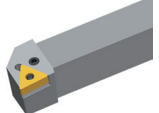
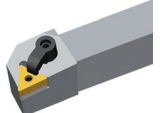
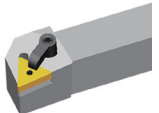
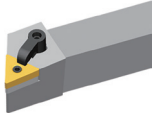
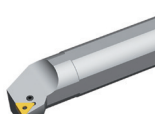
Foratura

D

Informazioni tecniche

E

Indice

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DTGNR/L                                                                             | PTFNR/L                                                                             | PTTNR/L                                                                             | PTGNR/L                                                                             | MTGNR/L                                                                              | MTJNR/L                                                                               | MTJNR/L                                                                               |
| Kr: 91°                                                                             | Kr: 91°                                                                             | Kr: 60°                                                                             | Kr: 90°                                                                             | Kr: 90°                                                                              | Kr: 93°                                                                               | Kr: 93°                                                                               |
|  |  |  |  |  |  |  |
| A233                                                                                | A247                                                                                | A248                                                                                | A249                                                                                | A260                                                                                 | A261                                                                                  | A262                                                                                  |
| MTFNR/L                                                                             | S***-PTFNR/L                                                                        |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| Kr: 91°                                                                             | Kr: 90°                                                                             |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |  |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A263                                                                                | A330                                                                                |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

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Scelta gradi > A42

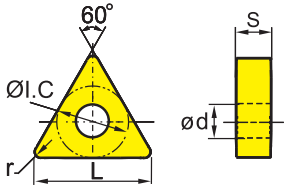
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TNMG  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 11 03 | 11   | 6,35  | 3,18 | 2,26 |
| 16 04 | 16,5 | 9,525 | 4,76 | 3,81 |
| 22 04 | 22   | 12,7  | 4,76 | 5,16 |

| TN** Inserti negativi                                                                               |               |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                    |               |     |                | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |                       | ●      | ●       | ●      | ●      |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |                | M                     |        |        |        |        |        | ●      | ●      |        |        |                       | ●      | ●       | ●      | ●      | ●               | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                                     |               |     |                | K                     |        |        |        |        |        |        |        | ●      | ●      | ●                     | ●      |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |                | N                     |        |        |        |        |        |        |        |        |        |                       | ●      | ●       |        |        |                 |        |        | ●      | ●      |        |        |         |       |       |
|                                                                                                     |               |     |                | S                     |        |        |        |        |        |        |        |        |        |                       |        | ●       | ●      | ●      | ●               | ●      |        |        | ●      | ●      |        |         |       |       |
|                                                                                                     |               |     |                | H                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                 |               | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>EF<br>Finitura | TNMG110304-EF | 0,4 | 0,1-1,0        | 0,05-0,20             |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                                     | TNMG110308-EF | 0,8 | 0,1-1,0        | 0,05-0,40             |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                                     | TNMG160404-EF | 0,4 | 0,1-1,5        | 0,05-0,30             |        |        |        |        |        |        | ●      |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                                     | TNMG160408-EF | 0,8 | 0,1-1,5        | 0,1-0,4               |        |        |        |        |        |        | ●      |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                                     | TNMG160412-EF | 1,2 | 0,2-2,5        | 0,15-0,40             |        |        |        |        |        |        | ○      |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                                     | TNMG220404-EF | 0,4 | 0,5-2,5        | 0,05-0,25             |        |        |        |        |        |        | ○      |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                                     | TNMG220408-EF | 0,8 | 0,5-2,5        | 0,1-0,4               |        |        |        |        |        |        | ○      |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile |              |         |         |         |         |         |
|---------------|--------------|---------|---------|---------|---------|---------|
| DTGNN/L       | PTFNN/L      | PTTNN/L | PTGNN/L | MTGNN/L | MTJNN/L | MTJNN/L |
| Kr: 91°       | Kr: 91°      | Kr: 60° | Kr: 90° | Kr: 90° | Kr: 93° | Kr: 93° |
|               |              |         |         |         |         |         |
| A233          | A247         | A248    | A249    | A260    | A261    | A262    |
| MTFNN/L       | S***-PTFNN/L |         |         |         |         |         |
| Kr: 91°       | Kr: 90°      |         |         |         |         |         |
|               |              |         |         |         |         |         |
| A263          | A330         |         |         |         |         |         |

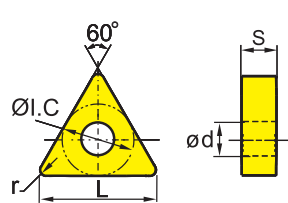
A

Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TNMG  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,5 | 9,525 | 4,76 | 3,81 |
| 22 04 | 22   | 12,7  | 4,76 | 5,16 |

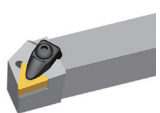
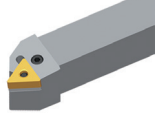
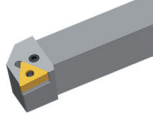
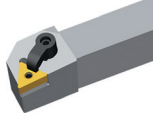
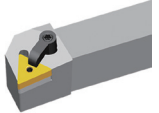
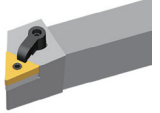
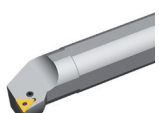
| TN** Inserti negativi                                                                              |                |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |         |       |       |   |
|----------------------------------------------------------------------------------------------------|----------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|--------|-----------------|--------|--------|--------|--------|---------|-------|-------|---|
|                   |                |     |                |           | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |                       |         |        | ●      | ●      | ●      | ●               |        |        |        |        |         |       |       |   |
|                                                                                                    |                |     |                |           | M                     |        |        |        |        |        | ●      | ●      |        |        |                       |         |        |        | ●      | ●      | ●               | ●      | ●      | ●      | ●      |         |       |       |   |
|                                                                                                    |                |     |                |           | K                     |        |        |        |        |        |        |        |        | ●      | ●                     | ●       | ●      |        |        |        |                 |        |        |        |        |         |       |       |   |
|                                                                                                    |                |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         |        | ●      | ●      |        |                 |        |        |        |        | ●       | ●     |       |   |
|                                                                                                    |                |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        | ●      | ●               | ●      | ●      | ●      |        |         |       | ●     | ● |
|                                                                                                    |                |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |
| ISO                                                                                                |                | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320          | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |   |
| <br>Finitura      | TNMG160404L-FM | 0,4 | 0,5-3,0        | 0,1-0,3   |                       |        |        |        |        | ●      |        |        |        |        |                       |         |        |        |        | ●      |                 |        |        |        |        |         |       |       |   |
|                                                                                                    | TNMG160404R-FM | 0,4 | 0,5-3,0        | 0,1-0,3   |                       |        | ○      |        |        | ●      |        |        |        |        |                       |         |        |        |        | ●      |                 |        |        |        |        |         |       |       |   |
|                                                                                                    | TNMG160408L-FM | 0,8 | 0,5-3,0        | 0,15-0,50 |                       |        | ○      |        |        | ●      |        |        |        |        |                       |         |        |        |        | ●      |                 |        |        |        |        |         |       |       |   |
|                                                                                                    | TNMG160408R-FM | 0,8 | 0,5-3,0        | 0,15-0,50 |                       |        |        | ●      |        | ●      |        |        |        |        |                       |         |        |        |        | ●      |                 |        |        |        |        |         |       |       |   |
| <br>Media Lavor. | TNMG160404-XM  | 0,4 | 1-5,6          | 0,2-0,4   | ●                     |        | ○      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |
|                                                                                                    | TNMG160408-XM  | 0,8 | 1-5,6          | 0,2-0,4   | ●                     |        |        | ●      |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |
|                                                                                                    | TNMG160412-XM  | 1,2 | 1-5,6          | 0,2-0,6   | ●                     |        |        | ●      |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |
|                                                                                                    | TNMG160416-XM  | 1,6 | 1-5,6          | 0,2-0,65  | ○                     |        |        | ●      |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |
|                                                                                                    | TNMG220408-XM  | 0,8 | 1-7,7          | 0,2-0,4   | ●                     |        |        | ●      |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |
|                                                                                                    | TNMG220412-XM  | 1,2 | 1-7,7          | 0,2-0,6   | ●                     |        |        | ●      |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |
|                                                                                                    | TNMG220416-XM  | 1,6 | 1-7,7          | 0,2-0,65  | ○                     |        |        | ●      |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DTG NR/L                                                                            | PTF NR/L                                                                            | PTT NR/L                                                                            | PTG NR/L                                                                            | MTG NR/L                                                                             | MTJ NR/L                                                                              | MTJ NR/L                                                                              |
| Kr: 91°                                                                             | Kr: 91°                                                                             | Kr: 60°                                                                             | Kr: 90°                                                                             | Kr: 90°                                                                              | Kr: 93°                                                                               | Kr: 93°                                                                               |
|  |  |  |  |  |  |  |
| A233                                                                                | A247                                                                                | A248                                                                                | A249                                                                                | A260                                                                                 | A261                                                                                  | A262                                                                                  |
| MTF NR/L                                                                            | S***-PTF NR/L                                                                       |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| Kr: 91°                                                                             | Kr: 90°                                                                             |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |  |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A263                                                                                | A330                                                                                |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

E

Indice

Codice sistema > A48

Scelta gradi > A42

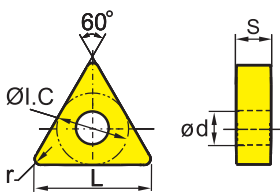
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

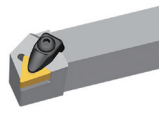
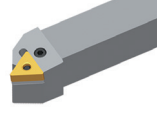
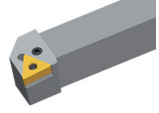
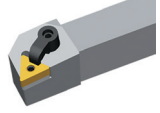
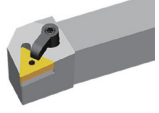
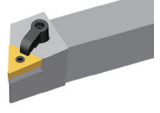
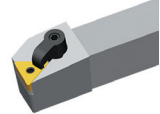
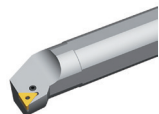
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TNMG  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 11 03 | 11   | 6,35  | 3,18 | 2,26 |
| 16 04 | 16,5 | 9,525 | 4,76 | 3,81 |
| 22 04 | 22   | 12,7  | 4,76 | 5,16 |

| TN** Inserti negativi                                                                               |                      |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------------------------|----------------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                    |                      |     |                |           | <b>P</b>              |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     |                      |     |                |           | <b>M</b>              |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     |                      |     |                |           | <b>K</b>              |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     |                      |     |                |           | <b>N</b>              |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     |                      |     |                |           | <b>S</b>              |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     |                      |     |                |           | <b>H</b>              |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                 |                      | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Media Lavor.   | <b>TNMG110308-DM</b> | 0,8 | 0,3-3,0        | 0,1-0,4   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG160404-DM</b> | 0,4 | 0,4-5,0        | 0,1-0,3   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG160408-DM</b> | 0,8 | 0,5-5,0        | 0,15-0,50 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG160412-DM</b> | 1,2 | 0,8-5,0        | 0,18-0,60 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG220404-DM</b> | 0,4 | 0,4-6,6        | 0,1-0,3   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG220408-DM</b> | 0,8 | 0,5-6,6        | 0,15-0,50 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG220412-DM</b> | 1,2 | 0,8-6,6        | 0,18-0,60 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG220416-DM</b> | 1,6 | 1,0-6,6        | 0,23-0,65 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| <br>Media Lavor. | <b>TNMG110304-PM</b> | 0,4 | 0,4-3,0        | 0,1-0,3   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG110308-PM</b> | 0,8 | 0,4-3,0        | 0,15-0,40 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG160404-PM</b> | 0,4 | 0,4-5,0        | 0,1-0,3   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG160408-PM</b> | 0,8 | 0,5-5,0        | 0,15-0,50 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG160412-PM</b> | 1,2 | 0,8-5,0        | 0,18-0,60 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG220408-PM</b> | 0,8 | 0,5-6,6        | 0,15-0,50 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG220412-PM</b> | 1,2 | 0,8-6,6        | 0,18-0,60 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     | <b>TNMG220416-PM</b> | 1,6 | 1,0-6,6        | 0,23-0,65 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DTGNR/L                                                                             | PTFNR/L                                                                             | PTTNR/L                                                                             | PTGNR/L                                                                             | MTGNR/L                                                                              | MTJNR/L                                                                               | MTJNR/L                                                                               |
| Kr: 91°                                                                             | Kr: 91°                                                                             | Kr: 60°                                                                             | Kr: 90°                                                                             | Kr: 90°                                                                              | Kr: 93°                                                                               | Kr: 93°                                                                               |
|  |  |  |  |  |  |  |
| A233                                                                                | A247                                                                                | A248                                                                                | A249                                                                                | A260                                                                                 | A261                                                                                  | A262                                                                                  |
| MTFNR/L                                                                             | S***-PTFNR/L                                                                        |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| Kr: 91°                                                                             | Kr: 90°                                                                             |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |  |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A263                                                                                | A330                                                                                |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366



A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

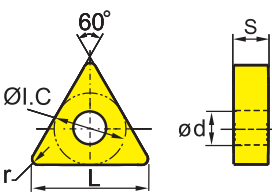
E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

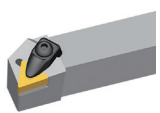
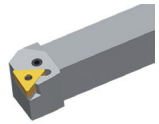
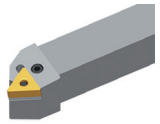
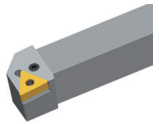
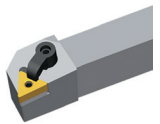
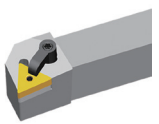
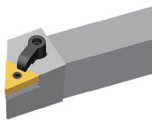
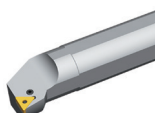
| TNMG  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,5 | 9,525 | 4,76 | 3,81 |

## Inserti - Tornitura

| TN** Inserti negativi                                                                    |                |     |                |           | HC <sup>1</sup> (CVD) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | HC <sup>1</sup> (PVD)                                                               |                                                                                     |                                                                                     |                                                                                     | HT                                                                                  | HC <sup>2</sup>                                                                     | HW                                                                                  |                                                                                     |        |        |                                                                                     |                                                                                     |       |       |
|------------------------------------------------------------------------------------------|----------------|-----|----------------|-----------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|-------|
|         |                |     |                |           | P                     |  |  |  |  |  |                                                                                   |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |                                                                                     |                                                                                     |       |       |
|                                                                                          |                |     |                |           | M                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |                                                                                   |                                                                                     |                                                                                     |  |  |  |  |  |  |  |        |        |                                                                                     |                                                                                     |       |       |
|                                                                                          |                |     |                |           | K                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |   |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |                                                                                     |                                                                                     |       |       |
|                                                                                          |                |     |                |           | N                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |  |  |       |       |
|                                                                                          |                |     |                |           | S                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |                                                                                     |        |        |  |  |       |       |
|                                                                                          |                |     |                |           | H                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |                                                                                     |                                                                                     |       |       |
| ISO                                                                                      |                | r   | a <sub>p</sub> | f         | YBC103                | YB6315                                                                            | YBC152                                                                            | YBC203                                                                            | YBC252                                                                            | YBC352                                                                            | YBM153                                                                            | YBM253                                                                            | YBD102                                                                            | YB7315                                                                              | YBD152                                                                              | YBD152C                                                                             | YBG101                                                                              | YBG102                                                                              | YBG105                                                                              | YBG205                                                                              | YB9320                                                                              | YPD201                                                                              | YBS103 | YNG151 | YNT251                                                                              | YNG151C                                                                             | YD101 | YD201 |
| <br>ZM  | TNMG160404-ZM  | 0,4 | 0,5-5,0        | 0,08-0,30 | ●                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |                                                                                     |                                                                                     |       |       |
|                                                                                          | TNMG160408-ZM  | 0,8 | 0,5-5,0        | 0,1-0,4   | ●                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |                                                                                     |                                                                                     |       |       |
|                                                                                          | TNMG160412-ZM  | 1,2 | 0,5-5,0        | 0,1-0,6   | ●                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |                                                                                     |                                                                                     |       |       |
| Media Lavor.                                                                             |                |     |                |           |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |                                                                                     |                                                                                     |       |       |
| <br>SNR | TNMG160408-SNR | 0,8 | 1-5,6          | 0,1-0,5   |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |        |        |                                                                                     |                                                                                     |       |       |
|                                                                                          |                |     |                |           |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |                                                                                     |                                                                                     |       |       |
| Sgrossatura                                                                              |                |     |                |           |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |                                                                                     |                                                                                     |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DTGNR/L                                                                             | PTFNR/L                                                                             | PTTNR/L                                                                             | PTGNR/L                                                                             | MTGNR/L                                                                              | MTJNR/L                                                                               | MTJNR/L                                                                               |
| Kr: 91°                                                                             | Kr: 91°                                                                             | Kr: 60°                                                                             | Kr: 90°                                                                             | Kr: 90°                                                                              | Kr: 93°                                                                               | Kr: 93°                                                                               |
|  |  |  |  |  |  |  |
| A233                                                                                | A247                                                                                | A248                                                                                | A249                                                                                | A260                                                                                 | A261                                                                                  | A262                                                                                  |
| MTFNR/L                                                                             | S***-PTFNR/L                                                                        |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| Kr: 91°                                                                             | Kr: 90°                                                                             |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |  |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A263                                                                                | A330                                                                                |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

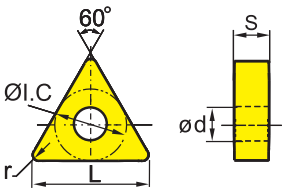
Dati di taglio > A366



## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TNMG  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,5 | 9,525 | 4,76 | 3,81 |
| 22 04 | 22   | 12,7  | 4,76 | 5,16 |

| TN** Inserti negativi                                                                     |               |     |                |           | HC <sup>1</sup> (CVD) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            | HC <sup>1</sup> (PVD) |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        | HT     | HC <sup>2</sup> | HW     |        |                                                                                                                                                                         |        |        |        |         |       |       |
|-------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|-----------------|--------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|---------|-------|-------|
|          |               |     |                |           | P                     |       |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            |                       |        |                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                |        |        |                 |        |        |                                                                                                                                                                         |        |        |        |         |       |       |
|                                                                                           |               |     |                |           | M                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |   |        |                                                                                                                                                                                                                                                                                                                                            |                       |        |       |                                                                                                                                                                                                                                                                                                                                                   |        |        |                 |        |        |                                                                                                                                                                         |        |        |        |         |       |       |
|                                                                                           |               |     |                |           | K                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |     |                       |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 |        |        |                                                                                                                                                                         |        |        |        |         |       |       |
|                                                                                           |               |     |                |           | N                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            |                       |        |                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 |        |        |   |        |        |        |         |       |       |
|                                                                                           |               |     |                |           | S                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            |                       |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |        |        |                 |        |        |   |        |        |        |         |       |       |
|                                                                                           |               |     |                |           | H                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            |                       |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 |        |        |                                                                                                                                                                         |        |        |        |         |       |       |
| ISO                                                                                       |               | r   | a <sub>p</sub> | f         | YBC103                | YB6315                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | YBC152 | YBC203 | YBC252 | YBC352                                                                                                                                                              | YBM153 | YBM253                                                                                                                                                                                                                                                                                                                                     | YBD102                | YB7315 | YBD152                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | YBD152C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201                                                                                                                                                                  | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| EG<br>   | TNMG160404-EG | 0,4 | 0,5-4,0        | 0,1-0,3   |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            |                       |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 |        | ●      |                                                                                                                                                                         |        |        |        |         |       |       |
|                                                                                           | TNMG160408-EG | 0,8 | 0,5-4,0        | 0,1-0,4   |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     | ●      | ●                                                                                                                                                                                                                                                                                                                                          |                       |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 |        | ●      | ●                                                                                                                                                                       |        |        |        |         |       |       |
|                                                                                           | TNMG160412-EG | 1,2 | 0,5-4,0        | 0,15-0,50 |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            | ●                     |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 |        | ●      |                                                                                                                                                                         |        |        |        |         |       |       |
| Media Lavor.                                                                              |               |     |                |           |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            |                       |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 |        |        |                                                                                                                                                                         |        |        |        |         |       |       |
| EM<br>   | TNMG160404-EM | 0,4 | 0,5-4,8        | 0,05-0,30 |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     | ●      | ○                                                                                                                                                                                                                                                                                                                                          |                       |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 | ●      |        |                                                                                                                                                                         |        |        |        |         |       |       |
|                                                                                           | TNMG160408-EM | 0,8 | 0,5-4,8        | 0,10-0,45 |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     | ●      | ●                                                                                                                                                                                                                                                                                                                                          |                       |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 | ●      |        |                                                                                                                                                                         |        |        |        |         |       |       |
|                                                                                           | TNMG160412-EM | 1,2 | 0,5-4,8        | 0,1-0,6   |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     | ●      | ●                                                                                                                                                                                                                                                                                                                                          |                       |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 | ●      |        |                                                                                                                                                                         |        |        |        |         |       |       |
|                                                                                           | TNMG220408-EM | 0,8 | 0,5-6,6        | 0,10-0,45 |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     | ●      | ●                                                                                                                                                                                                                                                                                                                                          |                       |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 | ●      |        |                                                                                                                                                                         |        |        |        |         |       |       |
|                                                                                           | TNMG220412-EM | 1,2 | 0,5-6,6        | 0,1-0,6   |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        | ○                                                                                                                                                                                                                                                                                                                                          | ●                     |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 | ●      |        |                                                                                                                                                                         |        |        |        |         |       |       |
|                                                                                           | TNMG220416-EM | 1,6 | 0,5-6,6        | 0,10-0,65 |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            | ●                     |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 | ●      |        |                                                                                                                                                                         |        |        |        |         |       |       |
| TC<br> | TNMG160404-TC | 0,4 | 0,5-3,0        | 0,05-0,20 |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            |                       | ●      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ●                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |        |                 |        |        |                                                                                                                                                                         |        |        |        |         |       |       |
|                                                                                           | TNMG160408-TC | 0,8 | 0,5-3,0        | 0,08-0,25 |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            |                       | ●      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ●                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |        |                 |        |        |                                                                                                                                                                         |        |        |        |         |       |       |
|                                                                                           | TNMG160412-TC | 1,2 | 1-3            | 0,1-0,3   |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            |                       | ●      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ●                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |        |                 |        |        |                                                                                                                                                                         |        |        |        |         |       |       |
|                                                                                           | TNMG220412-TC | 1,2 | 1-6            | 0,15-0,40 |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            |                       | ●      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ●                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |        |                 |        |        |                                                                                                                                                                         |        |        |        |         |       |       |
|                                                                                           | TNMG220416-TC | 1,6 | 1-6            | 0,2-0,5   |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            |                       |        | ●                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 |        |        |                                                                                                                                                                         |        |        |        |         |       |       |
| Media Lavor.                                                                              |               |     |                |           |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |        |                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                            |                       |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |        |                 |        |        |                                                                                                                                                                         |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |              |         |         |         |         |         |
|---------------|--------------|---------|---------|---------|---------|---------|
| DTGNR/L       | PTFNR/L      | PTTNR/L | PTGNR/L | MTGNR/L | MTJNR/L | MTJNR/L |
| Kr: 91°       | Kr: 91°      | Kr: 60° | Kr: 90° | Kr: 90° | Kr: 93° | Kr: 93° |
|               |              |         |         |         |         |         |
| A233          | A247         | A248    | A249    | A260    | A261    | A262    |
| MTFNR/L       | S***-PTFNR/L |         |         |         |         |         |
| Kr: 91°       | Kr: 90°      |         |         |         |         |         |
|               |              |         |         |         |         |         |
| A263          | A330         |         |         |         |         |         |

Codice sistema > A48

Scelta gradi > A42

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Dati di taglio > A366

A

Tornitura

B

Fresatura

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D

Informazioni tecniche

E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura

| TNMG  | L    | I.C    | S    | d    |
|-------|------|--------|------|------|
| 16 04 | 16,5 | 9,525  | 4,76 | 3,81 |
| 22 04 | 22   | 12,7   | 4,76 | 5,16 |
| 27 06 | 27,5 | 15,875 | 6,35 | 6,35 |

| TN** Inserti negativi     |               |     |          |           | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        | HT      | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |         |       |       |
|---------------------------|---------------|-----|----------|-----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|---------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                           |               |     |          |           | P                     | ●              | ● | ●      | ●      | ●      | ●      |        |        |        |                       | ●      | ●      | ●      | ●       |                 |        |        |        |        |        |        |        |        |         |       |       |
|                           |               |     |          |           | M                     |                |   |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●      | ●      | ●       | ●               | ●      |        |        |        |        |        |        |        |         |       |       |
|                           |               |     |          |           | K                     |                |   |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                           |               |     |          |           | N                     |                |   |        |        |        |        |        |        |        | ●                     | ●      |        |        |         |                 |        |        | ●      | ●      |        |        |        |        |         |       |       |
|                           |               |     |          |           | S                     |                |   |        |        |        |        |        |        |        |                       | ●      | ●      | ●      | ●       | ●               |        |        | ●      | ●      |        |        |        |        |         |       |       |
|                           |               |     |          |           | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
| ISO                       |               |     |          |           | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C | YBG101          | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>DR<br><br>Sgrossatura | TNMG160408-DR | 0,8 | 0,7-6,0  | 0,20-0,55 |                       |                | ● | ●      |        |        |        |        |        |        |                       | ●      | ●      |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                           | TNMG160412-DR | 1,2 | 1-6      | 0,25-0,65 |                       |                | ● | ●      |        |        |        |        |        |        |                       | ○      | ●      |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                           | TNMG220408-DR | 0,8 | 0,7-7,0  | 0,20-0,55 |                       |                |   |        |        |        | ●      |        |        |        |                       |        |        | ○      |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                           | TNMG220412-DR | 1,2 | 1-7      | 0,25-0,65 |                       |                | ○ | ●      |        |        |        |        |        |        |                       |        |        | ●      |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                           | TNMG220416-DR | 1,6 | 1,5-7,0  | 0,32-0,75 |                       |                |   |        |        |        | ●      |        |        |        |                       |        | ○      | ●      |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                           | TNMG270608-DR | 0,8 | 1,5-12,0 | 0,35-0,55 |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                           | TNMG270612-DR | 1,2 | 2-12     | 0,35-0,75 |                       |                |   |        |        |        |        | ○      |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |               |          |          |          |          |          |
|---------------|---------------|----------|----------|----------|----------|----------|
| DTG NR/L      | PTF NR/L      | PTT NR/L | PTG NR/L | MTG NR/L | MTJ NR/L | MTJ NR/L |
| Kr: 91°       | Kr: 91°       | Kr: 60°  | Kr: 90°  | Kr: 90°  | Kr: 93°  | Kr: 93°  |
|               |               |          |          |          |          |          |
| A233          | A247          | A248     | A249     | A260     | A261     | A262     |
| MTF NR/L      | S***-PTF NR/L |          |          |          |          |          |
| Kr: 91°       | Kr: 90°       |          |          |          |          |          |
|               |               |          |          |          |          |          |
| A263          | A330          |          |          |          |          |          |

Codice sistema > A48

Scelta gradi > A42

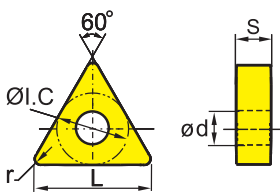
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TN**  | L    | I.C    | S    | d    |
|-------|------|--------|------|------|
| 16 04 | 16,5 | 9,525  | 4,76 | 3,81 |
| 22 04 | 22   | 12,7   | 4,76 | 5,16 |
| 27 06 | 27,5 | 15,875 | 6,35 | 5,16 |

| TN** Inserti negativi                                                                                                    |                      |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |   |
|--------------------------------------------------------------------------------------------------------------------------|----------------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|---|
|                                         |                      |     |                | <b>P</b>              | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |                       |        | ●       | ●      |        | ●      | ●               | ●      |        |        |        |        |         |       |       |   |
|                                                                                                                          |                      |     |                | <b>M</b>              |        |        |        |        |        | ●      | ●      |        |        |                       |        |         | ●      | ●      | ●      | ●               | ●      | ●      | ●      | ●      | ●      | ●       |       |       |   |
|                                                                                                                          |                      |     |                | <b>K</b>              |        |        |        |        |        |        |        |        |        | ●                     | ●      | ●       | ●      |        |        |                 |        |        |        |        |        |         |       |       |   |
|                                                                                                                          |                      |     |                | <b>N</b>              |        |        |        |        |        |        |        |        |        |                       |        |         | ●      | ●      |        |                 |        |        |        |        |        |         | ●     | ●     |   |
|                                                                                                                          |                      |     |                | <b>S</b>              |        |        |        |        |        |        |        |        |        |                       |        |         |        | ●      | ●      | ●               | ●      | ●      | ●      |        |        |         |       | ●     | ● |
|                                                                                                                          |                      |     |                | <b>H</b>              |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
| ISO                                                                                                                      |                      | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |   |
| <div>DR</div>  <div>Sgrossatura</div>   | <b>TNMM160408-DR</b> | 0,8 | 0,7-6,0        | 0,20-0,55             |        |        | ○      |        | ●      |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
|                                                                                                                          | <b>TNMM160412-DR</b> | 1,2 | 1-6            | 0,25-0,70             |        |        | ○      |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
|                                                                                                                          | <b>TNMM220408-DR</b> | 0,8 | 0,7-8,0        | 0,20-0,55             |        |        | ○      |        | ○      |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
|                                                                                                                          | <b>TNMM220412-DR</b> | 1,2 | 1-8            | 0,25-0,70             |        |        |        |        |        | ●      |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
|                                                                                                                          | <b>TNMM220416-DR</b> | 1,6 | 1,5-8,0        | 0,32-0,90             |        |        |        |        |        | ○      |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
|                                                                                                                          | <b>TNMM270612-DR</b> | 1,2 | 2,5-11,0       | 0,25-0,70             |        |        |        |        |        | ○      |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
|                                                                                                                          | <b>TNMM270616-DR</b> | 1,6 | 2,5-11,0       | 0,3-0,9               |        |        |        |        |        | ○      |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
| <div>ER</div>  <div>Sgrossatura</div>  | <b>TNMG160408-ER</b> | 0,8 | 2,0-5,6        | 0,15-0,55             |        |        |        |        |        |        |        | ○      |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
|                                                                                                                          | <b>TNMG160412-ER</b> | 1,2 | 2,0-5,6        | 0,15-0,60             |        |        |        |        |        |        |        | ○      |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
|                                                                                                                          | <b>TNMG220408-ER</b> | 0,8 | 2,0-7,7        | 0,15-0,55             |        |        |        |        |        |        |        | ○      |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
|                                                                                                                          | <b>TNMG220412-ER</b> | 1,2 | 2,0-7,7        | 0,15-0,60             |        |        |        |        |        |        |        | ○      |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
| <div>LR</div>  <div>Sgrossatura</div> | <b>TNMM160408-LR</b> | 0,8 | 1-5            | 0,1-0,5               |        | ●      |        | ●      |        | ●      |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
|                                                                                                                          | <b>TNMM160412-LR</b> | 1,2 | 1,5-6,0        | 0,1-0,6               |        | ○      |        | ○      |        |        |        | ○      |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |
|                                                                                                                          |                      |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |   |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

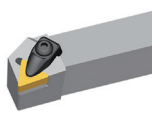
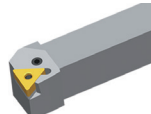
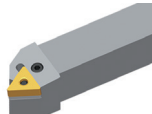
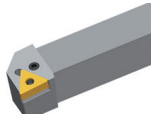
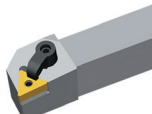
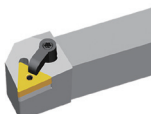
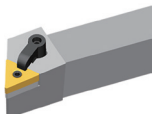
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**E**

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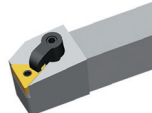
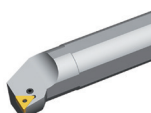
A

Tornitura

| Portautensile                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DTG NR/L                                                                          | PTF NR/L                                                                          | PTT NR/L                                                                          | PTG NR/L                                                                          | MTG NR/L                                                                           | MTJ NR/L                                                                            | MTJ NR/L                                                                            |
| Kr: 91°                                                                           | Kr: 91°                                                                           | Kr: 60°                                                                           | Kr: 90°                                                                           | Kr: 90°                                                                            | Kr: 93°                                                                             | Kr: 93°                                                                             |
|  |  |  |  |  |  |  |
| A233                                                                              | A247                                                                              | A248                                                                              | A249                                                                              | A260                                                                               | A261                                                                                | A262                                                                                |

B

Fresatura

| MTF NR/L                                                                          | S***-PTF NR/L                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Kr: 91°                                                                           | Kr: 90°                                                                           |
|  |  |
| A263                                                                              | A330                                                                              |

C

Foratura

D

Informazioni  
tecniche

E

Indice

Codice sistema > A48

Scelta gradi > A42

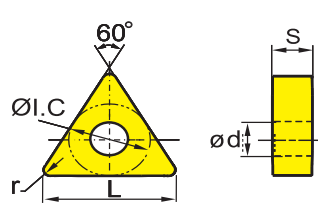
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

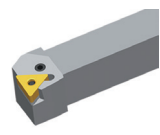
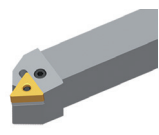
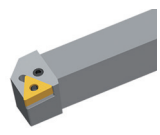
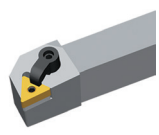
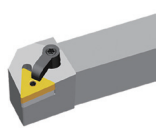
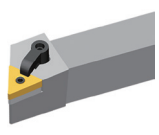
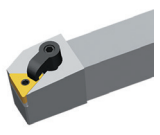
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TNMM  | L    | I.C    | S    | d    |
|-------|------|--------|------|------|
| 22 04 | 22   | 12,7   | 4,76 | 5,16 |
| 27 06 | 27,5 | 15,875 | 6,35 | 6,35 |

| TN** Inserti negativi                                                                          |                |     |     |           | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         |        | HT      | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |         |       |       |
|------------------------------------------------------------------------------------------------|----------------|-----|-----|-----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|---------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|               |                |     |     |           | P                     | ●              | ● | ●      | ●      | ●      | ●      |        |        |        | ●                     | ●      |         | ●      | ●       | ●               |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                |                |     |     |           | M                     |                |   |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●       | ●      | ●       | ●               | ●      | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                                |                |     |     |           | K                     |                |   |        |        |        |        |        | ●      | ●      | ●                     | ●      |         |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                |                |     |     |           | N                     |                |   |        |        |        |        |        |        |        |                       | ●      | ●       |        |         |                 |        |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                                |                |     |     |           | S                     |                |   |        |        |        |        |        |        |        |                       |        | ●       | ●      | ●       | ●               | ●      |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                                |                |     |     |           | H                     |                |   |        |        |        |        |        |        |        |                       |        |         |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                            |                |     |     |           | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YBD7315 | YBD152 | YBD152C | YBG101          | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Alta asp. | TNMM220412-HDR | 1,2 | 2-9 | 0,25-0,80 |                       |                |   | ○      |        |        |        |        |        |        |                       |        |         |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                | TNMM220416-HDR | 1,6 | 2-9 | 0,35-1,00 |                       |                |   |        |        |        |        | ○      |        |        |                       |        |         |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                | TNMM270616-HDR | 1,6 | 2-6 | 0,35-1,00 |                       |                |   |        |        |        |        | ●      |        |        |                       |        |         |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                | TNMM270624-HDR | 2,4 | 2-7 | 0,4-1,2   |                       |                |   |        |        |        |        | ●      |        | ○      |                       |        |         |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| PTFNR/L                                                                             | PTTNR/L                                                                             | PTGNR/L                                                                             | MTGNR/L                                                                             | MTJNR/L                                                                              | MTJNR/L                                                                               | MTFNR/L                                                                               |
| Kr: 91°                                                                             | Kr: 60°                                                                             | Kr: 90°                                                                             | Kr: 90°                                                                             | Kr: 93°                                                                              | Kr: 93°                                                                               | Kr: 91°                                                                               |
|  |  |  |  |  |  |  |
| A247                                                                                | A248                                                                                | A249                                                                                | A260                                                                                | A261                                                                                 | A262                                                                                  | A263                                                                                  |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

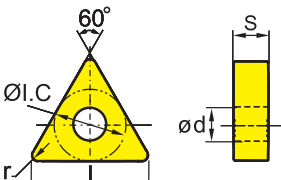
E

Indice

| TNMG  | L    | I.C    | S     | d    |
|-------|------|--------|-------|------|
| 16 04 | 16,5 | 9,525  | 4,76  | 3,81 |
| 22 04 | 22   | 12,7   | 4,76  | 5,16 |
| 27 06 | 27,5 | 15,875 | 6,35  | 6,35 |
| 33 09 | 33   | 19,05  | 9,525 | 7,94 |

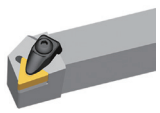
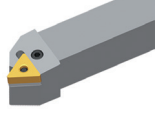
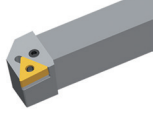
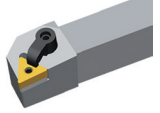
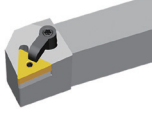
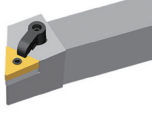
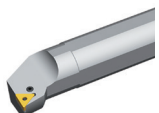
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura

| TN** Inserti negativi                                                                                                                                                                                |            |     |          |           | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |        |         |       |       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----|----------|-----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                                                                                                                     |            |     |          |           | P                     | ●              | ● | ●      | ●      | ●      | ●      |        |        |        |                       | ●      | ●      | ●      | ●               |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      |            |     |          |           | M                     |                |   |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●      | ●      | ●               | ●      | ●      | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      |            |     |          |           | K                     |                |   |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      |            |     |          |           | N                     |                |   |        |        |        |        |        |        |        |                       | ●      | ●      |        |                 |        |        | ●      | ●      |        |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      |            |     |          |           | S                     |                |   |        |        |        |        |        |        |        |                       |        | ●      | ●      | ●               | ●      | ●      |        | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      |            |     |          |           | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                                                                                                                  |            |     |          |           | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C         | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Basic<br><br><br>Media Lavor. | TNMG160404 | 0,4 | 0,2-4,0  | 0,05-0,20 |                       |                |   |        |        |        |        | ○      |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      | TNMG160408 | 0,8 | 0,2-4,0  | 0,08-0,30 |                       |                |   |        | ●      |        | ●      |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      | TNMG160412 | 1,2 | 0,2-4,0  | 0,1-0,4   |                       |                |   |        | ●      |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      | TNMG220404 | 0,4 | 0,2-6,0  | 0,05-0,20 |                       |                |   |        |        |        |        | ○      |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      | TNMG220408 | 0,8 | 0,2-6,0  | 0,1-0,3   |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      | TNMG220416 | 1,6 | 0,2-6,0  | 0,1-0,5   |                       |                |   |        |        |        |        | ○      |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      | TNMG270612 | 1,2 | 0,2-9,0  | 0,1-0,5   |                       |                |   |        |        |        |        | ○      |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      | TNMG270616 | 1,6 | 0,2-9,0  | 0,1-0,5   |                       |                |   |        |        |        |        | ○      |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      | TNMG330916 | 1,6 | 0,2-11,0 | 0,1-0,5   |                       |                |   |        |        |        |        | ○      |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                                                                                                                      | TNMG330924 | 2,4 | 0,2-11,0 | 0,1-0,7   |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DTGNR/L                                                                             | PTFNR/L                                                                             | PTTNR/L                                                                             | PTGNR/L                                                                             | MTGNR/L                                                                              | MTJNR/L                                                                               | MTJNR/L                                                                               |
| Kr: 91°                                                                             | Kr: 91°                                                                             | Kr: 60°                                                                             | Kr: 90°                                                                             | Kr: 90°                                                                              | Kr: 93°                                                                               | Kr: 93°                                                                               |
|  |  |  |  |  |  |  |
| A233                                                                                | A247                                                                                | A248                                                                                | A249                                                                                | A260                                                                                 | A261                                                                                  | A262                                                                                  |
| MTFNR/L                                                                             | S***-PTFNR/L                                                                        |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| Kr: 91°                                                                             | Kr: 90°                                                                             |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |  |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A263                                                                                | A330                                                                                |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

Codice sistema > A48

Scelta gradi > A42

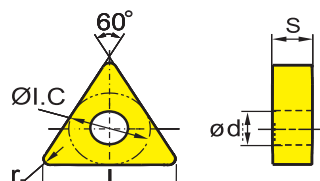
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

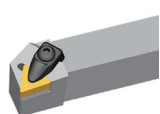
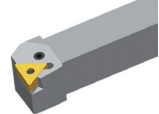
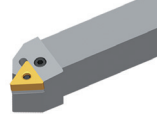
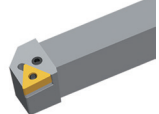
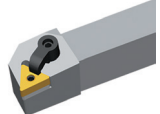
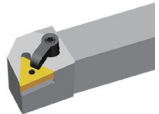
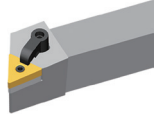
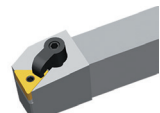
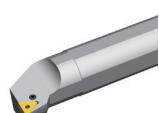
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TN**  | L    | I.C    | S    | d    |
|-------|------|--------|------|------|
| 16 04 | 16,5 | 9,525  | 4,76 | 3,81 |
| 22 04 | 22   | 12,7   | 4,76 | 5,16 |
| 27 06 | 27,5 | 15,875 | 6,35 | 6,35 |

| TN** Inserti negativi                                                                        |            |         |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |         |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |         |       |       |
|----------------------------------------------------------------------------------------------|------------|---------|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|             |            |         |                |           | P                     |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              |            |         |                |           | M                     |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              |            |         |                |           | K                     |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              |            |         |                |           | N                     |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              |            |         |                |           | S                     |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              |            |         |                |           | H                     |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                                                                                          |            | r       | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152 | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Flat    | TNMA160404 | 0,4     | 0,2-4,0        | 0,05-0,20 |                       |        |        |        |        |        |        |        |                       | ○      | ●      |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              | TNMA160408 | 0,8     | 0,2-4,0        | 0,08-0,30 |                       |        |        |        |        |        |        |        |                       | ●      | ●      | ●       |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              | TNMA160412 | 1,2     | 0,2-4,0        | 0,1-0,4   |                       |        |        |        |        |        |        |        |                       | ○      | ●      |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              | TNMA160416 | 1,6     | 0,5-4,0        | 0,05-0,50 |                       |        |        |        |        |        |        |        |                       | ○      | ○      |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              | TNMA220404 | 0,4     | 0,2-6,0        | 0,05-0,20 |                       |        |        |        |        |        |        |        |                       |        |        | ●       |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              | TNMA220408 | 0,8     | 0,2-6,0        | 0,1-0,3   |                       |        |        |        |        |        |        |        |                       | ●      |        | ●       |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              | TNMA220412 | 1,2     | 0,2-6,0        | 0,1-0,4   |                       |        |        |        |        |        |        |        |                       |        |        | ●       | ●      |        |                 |        |        |        |        |        |        |         |       |       |
| TNMA220416                                                                                   | 1,6        | 0,2-6,0 | 0,1-0,5        |           |                       |        |        |        |        |        |        |        |                       |        |        | ○       |        |        |                 |        |        |        |        |        |        |         |       |       |
| <br>Basic | TNMM160404 | 0,4     | 0,2-7,0        | 0,05-0,60 |                       |        |        | ○      |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              | TNMM160408 | 0,8     | 0,5-7,0        | 0,05-0,60 |                       |        |        | ○      |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              | TNMM220408 | 0,8     | 0,5-7,0        | 0,05-0,60 |                       |        |        | ○      |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              | TNMM220412 | 1,2     | 1-7            | 0,1-0,6   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              | TNMM220416 | 1,6     | 0,5-7,0        | 0,05-0,60 |                       |        |        |        | ○      |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                              | TNMM270616 | 1,6     | 0,5-6,5        | 0,05-0,70 |                       |        |        |        |        | ○      |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DTG NR/L                                                                            | PTF NR/L                                                                            | PTT NR/L                                                                            | PTG NR/L                                                                            | MTG NR/L                                                                             | MTJ NR/L                                                                              | MTJ NR/L                                                                              |
| Kr: 91°                                                                             | Kr: 91°                                                                             | Kr: 60°                                                                             | Kr: 90°                                                                             | Kr: 90°                                                                              | Kr: 93°                                                                               | Kr: 93°                                                                               |
|  |  |  |  |  |  |  |
| A233                                                                                | A247                                                                                | A248                                                                                | A249                                                                                | A260                                                                                 | A261                                                                                  | A262                                                                                  |
| MTF NR/L                                                                            | S***-PTF NR/L                                                                       |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| Kr: 91°                                                                             | Kr: 90°                                                                             |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |  |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A263                                                                                | A330                                                                                |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

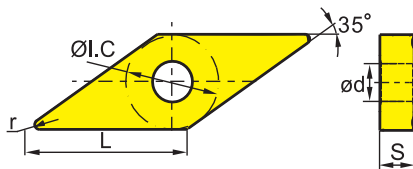
E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

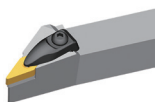
| VN**  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,6 | 9,525 | 4,76 | 3,81 |

## Inserti - Tornitura

| VN** Inserti negativi                                                             |                |     |           |           | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        | HT      | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|----------------|-----|-----------|-----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|---------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |                |     |           |           | P                     | ●              | ● | ●      | ●      | ●      | ●      |        |        |        |                       | ●      | ●      | ●      | ●       |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |           |           | M                     |                |   |        |        | ●      | ●      |        |        |        | ●                     | ●      | ●      | ●      | ●       | ●               | ●      |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |           |           | K                     |                |   |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |           |           | N                     |                |   |        |        |        |        |        |        |        |                       | ●      | ●      |        |         |                 |        | ●      | ●      |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |           |           | S                     |                |   |        |        |        |        |        |        |        |                       |        | ●      | ●      | ●       | ●               | ●      |        | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                   |                |     |           |           | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                               |                |     |           |           | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C | YBG101          | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| ADF                                                                               | VNMG160404-ADF | 0,4 | 0,5-2,5   | 0,1-0,3   | ●                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        | ●      |        |        |        |        |         |       |       |
|                                                                                   | VNMG160408-ADF | 0,8 | 0,5-2,5   | 0,1-0,5   | ●                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        | ●      |        |        |        |        |         |       |       |
| Finitura                                                                          |                |     |           |           |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
| DF                                                                                | VNMG160404-DF  | 0,4 | 0,25-1,50 | 0,07-0,30 | ○                     |                | ● |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | VNMG160408-DF  | 0,8 | 0,3-1,5   | 0,1-0,4   | ●                     |                | ● |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
| Finitura                                                                          |                |     |           |           |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
| EF                                                                                | VNMG160404-EF  | 0,4 | 0,1-1,5   | 0,05-0,25 |                       |                |   |        |        |        |        |        |        | ●      |                       |        |        |        |         |                 |        |        | ●      |        |        |        |        |        |         |       |       |
|                                                                                   | VNMG160408-EF  | 0,8 | 0,2-2,5   | 0,08-0,35 |                       |                |   |        |        |        |        |        |        | ●      |                       |        |        |        |         |                 |        |        | ●      |        |        |        |        |        |         |       |       |
|                                                                                   | VNMG160412-EF  | 1,2 | 0,2-2,5   | 0,10-0,45 |                       |                |   |        |        |        |        |        |        | ○      |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
| Finitura                                                                          |                |     |           |           |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
| NF                                                                                | VNEG160404-NF  | 0,4 | 0,2-4,0   | 0,05-0,30 |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        | ●      |        |        |        |        |        |        |         | ○     |       |
|                                                                                   | VNEG160408-NF  | 0,8 | 0,2-4,0   | 0,05-0,50 |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        | ●      |        |        |        |        |        |        |         | ○     |       |
| Finitura                                                                          |                |     |           |           |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DVVNN                                                                               | DVJNR/L                                                                             | MVVNN                                                                               | MVJNR/L                                                                             |
| Kr: 72°30'                                                                          | Kr: 93°                                                                             | Kr: 72°30'                                                                          | Kr: 93°                                                                             |
|  |  |  |  |
| A234                                                                                | A235                                                                                | A264                                                                                | A265                                                                                |

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

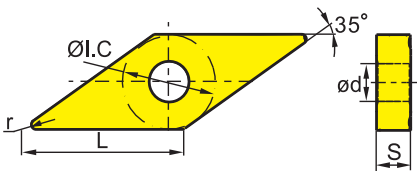
Dati di taglio > A366



## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VN**  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,6 | 9,525 | 4,76 | 3,81 |

| VN** Inserti negativi                                                             |                |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|----------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |                |     |                | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |                       | ●      | ●       |        | ●      | ●      |                 |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |                | M                     |        |        |        |        |        |        | ●      | ●      |        |                       | ●      | ●       | ●      | ●      | ●      | ●               | ●      |        |        |        |        |         |       |       |
|                                                                                   |                |     |                | K                     |        |        |        |        |        |        |        |        | ●      | ●                     | ●      | ●       |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |                | N                     |        |        |        |        |        |        |        |        |        |                       | ●      | ●       |        |        |        |                 |        | ●      | ●      |        |        |         |       |       |
|                                                                                   |                |     |                | S                     |        |        |        |        |        |        |        |        |        |                       |        | ●       | ●      | ●      | ●      | ●               |        |        | ●      | ●      |        |         |       |       |
|                                                                                   |                |     |                | H                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| ISO                                                                               |                | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| NGF                                                                               | VNEG160408-NGF | 0,8 | 0,2-3,0        | 0,1-0,3               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        | ●      |                 |        |        |        |        |        |         |       |       |
|                                                                                   | VNEG160412-NGF | 1,2 | 0,2-3,0        | 0,1-0,5               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        | ○      |                 |        |        |        |        |        |         |       |       |
| Finitura                                                                          |                |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| SF                                                                                | VNMG160404-SF  | 0,4 | 0,05-3,00      | 0,05-0,20             |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        | ●       |       |       |
|                                                                                   | VNMG160408-SF  | 0,8 | 0,05-3,00      | 0,05-0,35             |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        | ○       |       |       |
| Finitura                                                                          |                |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile |         |            |         |
|---------------|---------|------------|---------|
| DVVNN         | DVJNR/L | MVVNN      | MVJNR/L |
| Kr: 72°30'    | Kr: 93° | Kr: 72°30' | Kr: 93° |
|               |         |            |         |
| A234          | A235    | A264       | A265    |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

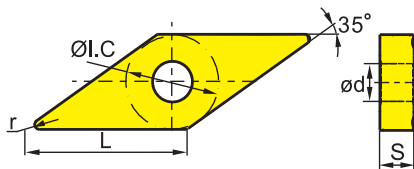
E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

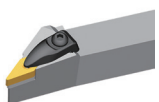
| VNMG  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,6 | 9,525 | 4,76 | 3,81 |

Inserti - Tornitura

| VN** Inserti negativi                                                             |               |     |                |          | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|---------------|-----|----------------|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|--------|-----------------|--------|--------|--------|--------|---------|-------|-------|
|  |               |     |                |          | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |                       | ●       | ●      |        | ●      | ●      | ●               |        |        |        |        |         |       |       |
|                                                                                   |               |     |                |          | M                     |        |        |        |        |        | ●      | ●      |        |        |                       | ●       | ●      | ●      | ●      | ●      | ●               | ●      | ●      |        |        |         |       |       |
|                                                                                   |               |     |                |          | K                     |        |        |        |        |        |        |        |        | ●      | ●                     | ●       | ●      |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   |               |     |                |          | N                     |        |        |        |        |        |        |        |        |        |                       |         | ●      | ●      |        |        |                 |        |        |        | ●      | ●       |       |       |
|                                                                                   |               |     |                |          | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        | ●      | ●      | ●               | ●      | ●      | ●      |        | ●       | ●     |       |
|                                                                                   |               |     |                |          | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| ISO                                                                               |               | r   | a <sub>p</sub> | f        | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320          | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| XF                                                                                | VNMG160404-XF | 0,4 | 0,5-2,5        | 0,1-0,25 | ●                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | VNMG160408-XF | 0,8 | 0,5-2,5        | 0,1-0,30 | ●                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | VNMG160412-XF | 1,2 | 0,5-2,5        | 0,1-0,35 | ●                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| Finitura                                                                          |               |     |                |          |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| XM                                                                                | VNMG160404-XM | 0,4 | 1-5,6          | 0,2-0,4  | ●                     |        | ○      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | VNMG160408-XM | 0,8 | 1-5,6          | 0,2-0,4  | ●                     |        | ●      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | VNMG160412-XM | 1,2 | 1-5,6          | 0,2-0,6  | ●                     |        | ●      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                   | VNMG160416-XM | 1,6 | 1-5,6          | 0,2-0,65 | ○                     |        | ○      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| Media Lavor.                                                                      |               |     |                |          |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

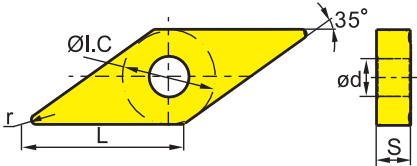
| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DVVNN                                                                               | DVJNR/L                                                                             | MVVNN                                                                               | MVJNR/L                                                                             |
| Kr: 72°30'                                                                          | Kr: 93°                                                                             | Kr: 72°30'                                                                          | Kr: 93°                                                                             |
|  |  |  |  |
| A234                                                                                | A235                                                                                | A264                                                                                | A265                                                                                |



## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VNMG  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,6 | 9,525 | 4,76 | 3,81 |

| VN** Inserti negativi                                                             |               |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |         |       |       |   |   |
|-----------------------------------------------------------------------------------|---------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|--------|-----------------|--------|--------|--------|--------|---------|-------|-------|---|---|
|  |               |     |                |           | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |                       |         |        | ●      | ●      |        | ●               | ●      |        |        |        |         |       |       |   |   |
|                                                                                   |               |     |                |           | M                     |        |        |        |        |        | ●      | ●      |        |        |                       |         |        |        | ●      | ●      | ●               | ●      | ●      | ●      | ●      |         |       |       |   |   |
|                                                                                   |               |     |                |           | K                     |        |        |        |        |        |        |        |        | ●      | ●                     | ●       | ●      |        |        |        |                 |        |        |        |        |         |       |       |   |   |
|                                                                                   |               |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         |        |        | ●      | ●      |                 |        |        |        |        |         |       | ●     | ● |   |
|                                                                                   |               |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        | ●               | ●      | ●      | ●      | ●      | ●       |       |       | ● | ● |
|                                                                                   |               |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |   |
| ISO                                                                               |               | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320          | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |   |   |
| Basic                                                                             | VNMG160404    | 0,4 | 0,2-6,0        | 0,05-0,60 |                       |        | ○      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |   |
|                                                                                   | VNMG160408    | 0,8 | 0,2-6,0        | 0,08-0,60 |                       |        | ○      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |   |
| Media Lavor.                                                                      |               |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |   |
| DM                                                                                | VNMG160408-DM | 0,8 | 0,5-4,0        | 0,15-0,50 |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |   |
|                                                                                   | VNMG160412-DM | 1,2 | 0,8-4,0        | 0,18-0,60 |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |   |
| Media Lavor.                                                                      |               |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |   |
| EM                                                                                | VNMG160404-EM | 0,4 | 0,2-3,0        | 0,05-0,30 |                       |        |        |        |        |        | ●      |        |        |        |                       |         |        |        |        | ●      |                 |        |        |        |        |         |       |       |   |   |
|                                                                                   | VNMG160408-EM | 0,8 | 0,5-4,0        | 0,10-0,45 |                       |        |        |        |        |        | ●      |        |        |        |                       |         |        |        |        | ●      |                 |        |        |        |        |         |       |       |   |   |
| Media Lavor.                                                                      |               |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |   |
| NM                                                                                | VNMG160412-NM | 1,2 | 0,2-4,0        | 0,05-0,40 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        | ●      |        |                 |        |        |        |        |         |       |       |   |   |
| Media Lavor.                                                                      |               |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |   |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile       |                    |                     |                    |
|---------------------|--------------------|---------------------|--------------------|
| DVVNN<br>Kr: 72°30' | DVJNR/L<br>Kr: 93° | MVVNN<br>Kr: 72°30' | MVJNR/L<br>Kr: 93° |
|                     |                    |                     |                    |
| A234                | A235               | A264                | A265               |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

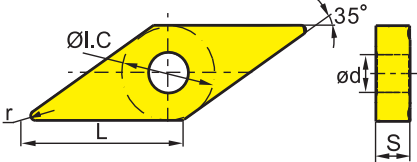
E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

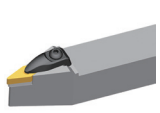
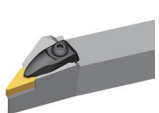
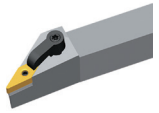
| VNMG  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,6 | 9,525 | 4,76 | 3,81 |

## Inserti - Tornitura

| VN** Inserti negativi                                                               |                |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |         |       |       |
|-------------------------------------------------------------------------------------|----------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|--------|-----------------|--------|--------|--------|--------|---------|-------|-------|
|    |                |     |                |           | P                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                     |                |     |                |           | M                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                     |                |     |                |           | K                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                     |                |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                     |                |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                     |                |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| ISO                                                                                 |                | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320          | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
|    | VNMG160404-PM  | 0,4 | 0,4-4,0        | 0,13-0,40 |                       | ●      |        | ●      |        |        |        |        | ●      |        | ○                     |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                     | VNMG160408-PM  | 0,8 | 0,5-4,0        | 0,15-0,50 |                       | ●      |        | ●      |        |        |        |        | ●      |        | ●                     |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                     | VNMG160412-PM  | 1,2 | 0,8-4,0        | 0,18-0,60 |                       |        |        |        | ●      |        |        |        | ●      |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| Media Lavor.                                                                        |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|    | VNMG160404-TC  | 0,4 | 0,5-2,0        | 0,05-0,20 |                       |        |        |        |        |        |        |        |        | ●      |                       | ●       |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                     | VNMG160408-TC  | 0,8 | 0,5-2,0        | 0,08-0,25 |                       |        |        |        |        |        |        |        |        | ●      |                       | ●       |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                     | VNMG160412-TC  | 1,2 | 0,5-3,0        | 0,08-0,30 |                       |        |        |        |        |        |        |        |        | ●      |                       | ●       |        |        |        |        |                 |        |        |        |        |         |       |       |
| Media Lavor.                                                                        |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|  | VNMG160404-ZM  | 0,4 | 0,5-3,0        | 0,08-0,30 |                       | ○      |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|                                                                                     | VNMG160408-ZM  | 0,8 | 0,5-3,0        | 0,1-0,4   |                       | ●      |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
| Media Lavor.                                                                        |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |
|  | VNMG160408-SNR | 0,8 | 0,2-2,0        | 0,1-0,4   |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        | ○      | ●               |        |        |        |        |         |       |       |
|                                                                                     | VNMG160412-SNR | 1,2 | 0,2-2,0        | 0,1-0,5   |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        | ●      |        | ○               | ●      |        |        |        |         |       |       |
| Sgrossatura                                                                         |                |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DVVNN                                                                               | DVJNR/L                                                                             | MVVNN                                                                               | MVJNR/L                                                                             |
| Kr: 72°30'                                                                          | Kr: 93°                                                                             | Kr: 72°30'                                                                          | Kr: 93°                                                                             |
|  |  |  |  |
| A234                                                                                | A235                                                                                | A264                                                                                | A265                                                                                |

Codice sistema > A48

Scelta gradi > A42

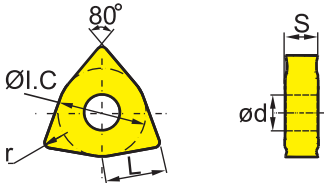
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

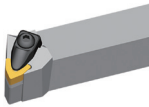
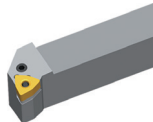
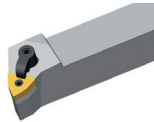
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| WNMG  | L   | I.C   | S    | d    |
|-------|-----|-------|------|------|
| 06 T3 | 6,5 | 9,525 | 3,97 | 3,81 |
| 06 04 | 6,5 | 9,525 | 4,76 | 3,81 |
| 08 04 | 8,7 | 12,7  | 4,76 | 5,16 |

| WN** Inserti negativi                                                                     |                |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|-------------------------------------------------------------------------------------------|----------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|          |                |     |                | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |                       |        | ●      | ●      |         | ●      | ●               | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                           |                |     |                | M                     |        |        |        |        |        | ●      | ●      |                       |        | ●      | ●      | ●       | ●      | ●               | ●      | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                           |                |     |                | K                     |        |        |        |        |        |        |        | ●                     | ●      | ●      | ●      |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                           |                |     |                | N                     |        |        |        |        |        |        |        |                       |        |        | ●      | ●       |        |                 |        |        |        |        | ●      | ●      |        |         |       |       |
|                                                                                           |                |     |                | S                     |        |        |        |        |        |        |        |                       |        |        |        |         | ●      | ●               | ●      | ●      | ●      |        |        | ●      | ●      |         |       |       |
|                                                                                           |                |     |                | H                     |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                       |                | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| ADF<br>  | WNMG080404-ADF | 0,4 | 0,2-2,5        | 0,05-0,30             | ●      |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        | ●      |        |        | ●      |        |         |       |       |
|                                                                                           | WNMG080408-ADF | 0,8 | 0,5-2,5        | 0,05-0,40             | ●      |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        | ○      | ●      |        |        | ●      |        |         |       |       |
|                                                                                           | WNMG080412-ADF | 1,2 | 0,5-2,5        | 0,05-0,50             | ●      |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        | ●      |        |        |        |         |       |       |
| Finitura                                                                                  |                |     |                |                       |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| DF<br>  | WNMG060404-DF  | 0,4 | 0,15-2,00      | 0,08-0,25             |        | ●      |        | ●      |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                           | WNMG060408-DF  | 0,8 | 0,15-2,00      | 0,1-0,3               |        | ●      |        | ●      |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                           | WNMG080404-DF  | 0,4 | 0,15-2,00      | 0,08-0,25             |        | ●      |        | ●      |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                           | WNMG080408-DF  | 0,8 | 0,15-2,00      | 0,1-0,3               |        | ●      |        | ○      |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                           | WNMG080412-DF  | 1,2 | 0,2-2,5        | 0,10-0,35             |        | ●      |        | ●      |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| Finitura                                                                                  |                |     |                |                       |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| SF<br> | WNMG060404-SF  | 0,4 | 0,05-0,50      | 0,05-0,20             |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        | ●      |         |       |       |
|                                                                                           | WNMG060408-SF  | 0,8 | 0,05-0,50      | 0,05-0,35             |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        | ●      |         |       |       |
|                                                                                           | WNMG06T304-SF  | 0,4 | 0,05-0,50      | 0,05-0,20             |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        | ●      |         |       |       |
|                                                                                           | WNMG06T308-SF  | 0,8 | 0,05-0,50      | 0,05-0,35             |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        | ●      |         |       |       |
|                                                                                           | WNMG080404-SF  | 0,4 | 0,05-0,50      | 0,05-0,20             |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        | ●      |         |       |       |
|                                                                                           | WNMG080408-SF  | 0,8 | 0,05-0,50      | 0,05-0,35             |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        | ●      |         |       |       |
| Finitura                                                                                  |                |     |                |                       |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DWLN/L                                                                              | PWLN/L                                                                              | MWLN/L                                                                              | S***-PWLN/L                                                                         |
| Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             |
|  |  |  |  |
| A236                                                                                | A251                                                                                | A266                                                                                | A332                                                                                |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

E

Indice

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| WN**  | L   | I.C   | S    | d    |
|-------|-----|-------|------|------|
| 06 T3 | 6,5 | 9,525 | 3,97 | 3,81 |
| 06 04 | 6,5 | 9,525 | 4,76 | 3,81 |
| 08 04 | 8,7 | 12,7  | 4,76 | 5,16 |

| WN** Inserti negativi |                |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |         |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |         |       |       |
|-----------------------|----------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                       |                |     |                |           | P                     | ●      | ●      | ●      | ●      | ●      |        |        |                       |        |        | ●       | ●      | ●      | ●               |        |        |        |        |        |        |         |       |       |
|                       |                |     |                |           | M                     |        |        |        |        |        | ●      | ●      |                       |        |        | ●       | ●      | ●      | ●               | ●      | ●      | ●      |        |        |        |         |       |       |
|                       |                |     |                |           | K                     |        |        |        |        |        |        |        |                       | ●      | ●      | ●       | ●      |        |                 |        |        |        |        |        |        |         |       |       |
|                       |                |     |                |           | N                     |        |        |        |        |        |        |        |                       |        |        |         | ●      | ●      |                 |        |        |        |        | ●      | ●      |         |       |       |
|                       |                |     |                |           | S                     |        |        |        |        |        |        |        |                       |        |        |         |        |        | ●               | ●      | ●      | ●      | ●      |        | ●      | ●       |       |       |
|                       |                |     |                |           | H                     |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                   |                | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152 | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>WG<br>Raschiante  | WNUMG080408-WG | 0,8 | 0,5-5,0        | 0,15-0,70 |                       |        | ●      |        | ●      |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                       | WNUMG080412-WG | 1,2 | 0,8-6,0        | 0,20-0,75 |                       |        | ●      |        | ○      |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| <br>EF<br>Finitura    | WNUMG060404-EF | 0,4 | 0,1-1,5        | 0,05-0,30 |                       |        |        |        |        |        |        | ○      |                       |        |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                       | WNUMG060408-EF | 0,8 | 0,1-1,5        | 0,1-0,4   |                       |        |        |        |        |        |        | ○      |                       |        |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                       | WNUMG06T308-EF | 0,8 | 0,1-1,5        | 0,1-0,4   |                       |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                       | WNUMG080404-EF | 0,4 | 0,1-1,5        | 0,05-0,30 |                       |        |        |        |        |        | ●      |        |                       |        |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                       | WNUMG080408-EF | 0,8 | 0,1-1,5        | 0,1-0,4   |                       |        |        |        |        |        | ●      |        |                       |        |        |         |        | ○      |                 | ●      |        |        |        |        |        |         |       |       |
| <br>NF<br>Finitura    | WNEG080404-NF  | 0,4 | 0,2-3,0        | 0,05-0,30 |                       |        |        |        |        |        |        |        |                       |        |        |         |        | ○      | ●               |        |        |        |        |        |        |         |       |       |
|                       | WNEG080408-NF  | 0,8 | 0,2-2,5        | 0,05-0,30 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |        | ●               |        |        |        |        |        |        |         |       |       |
|                       |                |     |                |           |                       |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| <br>NF<br>Finitura    | WNUMG060408-NF | 0,8 | 0,2-2,5        | 0,05-0,30 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |        | ●               |        |        |        |        |        |        |         |       |       |
|                       |                |     |                |           |                       |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |          |          |               |
|---------------|----------|----------|---------------|
| DWLNLR/L      | PWLNLR/L | MWLNLR/L | S***-PWLNLR/L |
| Kr: 95°       | Kr: 95°  | Kr: 95°  | Kr: 95°       |
|               |          |          |               |
| A236          | A251     | A266     | A332          |

Codice sistema > A48

Scelta gradi > A42

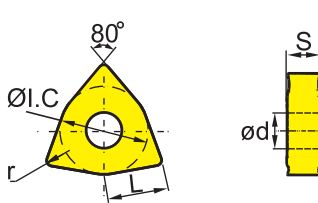
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

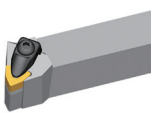
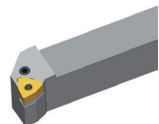
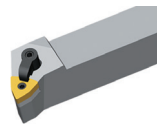
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| WNMG  | L   | I.C   | S    | d    |
|-------|-----|-------|------|------|
| 06 04 | 6,5 | 9,525 | 4,76 | 3,81 |
| 08 04 | 8,7 | 12,7  | 4,76 | 5,16 |

| WN** Inserti negativi                                                                    |               |     |         |          | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |  |  |
|------------------------------------------------------------------------------------------|---------------|-----|---------|----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|--|--|
|         |               |     |         |          | P                     |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          |               |     |         |          | M                     |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          |               |     |         |          | K                     |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          |               |     |         |          | N                     |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          |               |     |         |          | S                     |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          |               |     |         |          | H                     |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
| ISO                                                                                      |               |     |         |          | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |  |  |
| <br>XF  | WNMG060404-XF | 0,4 | 0,5-2,0 | 0,1-0,25 | ●                     |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          | WNMG060408-XF | 0,8 | 0,5-2,0 | 0,1-0,30 | ●                     |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          | WNMG080408-XF | 0,8 | 0,5-2,5 | 0,1-0,30 | ●                     |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          | WNMG080412-XF | 1,2 | 0,5-2,5 | 0,1-0,35 | ●                     |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
| Schlichten                                                                               |               |     |         |          |                       |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
| <br>XM | WNMG060404-XM | 0,4 | 1-2,1   | 0,2-0,4  | ●                     |                | ○ |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          | WNMG060408-XM | 0,8 | 1-2,1   | 0,2-0,4  | ●                     |                | ● |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          | WNMG060412-XM | 1,2 | 1-2,1   | 0,2-0,6  | ●                     |                | ● |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          | WNMG080404-XM | 0,4 | 1-2,8   | 0,2-0,4  | ●                     |                | ● |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          | WNMG080408-XM | 0,8 | 1-2,8   | 0,2-0,4  | ●                     |                | ● |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          | WNMG080412-XM | 1,2 | 1-2,8   | 0,2-0,6  | ●                     |                | ● |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
|                                                                                          | WNMG080416-XM | 1,6 | 1-2,8   | 0,2-0,65 | ○                     |                | ○ |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |
| Mittl. Bearb.                                                                            |               |     |         |          |                       |                |   |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DWLNR/L                                                                             | PWLNR/L                                                                             | MWLNR/L                                                                             | S***-PWLNR/L                                                                        |
| Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             |
|  |  |  |  |
| A236                                                                                | A251                                                                                | A266                                                                                | A332                                                                                |

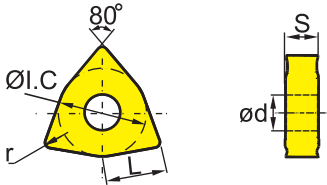
A

Tornitura

## Inserti - Tornitura

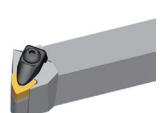
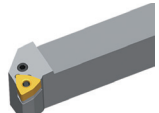
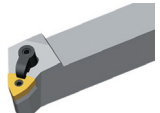
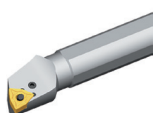
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| WNMG  | L   | I.C   | S    | d    |
|-------|-----|-------|------|------|
| 06 T3 | 6,5 | 9,525 | 3,97 | 3,81 |
| 06 04 | 6,5 | 9,525 | 4,76 | 3,81 |
| 08 04 | 8,7 | 12,7  | 4,76 | 5,16 |

| WN** Inserti negativi                                                                               |               |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|
|                    |               |     |                |           | P                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |                |           | M                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |                |           | K                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| ISO                                                                                                 |               | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Media Lavor.   | WNMG060408-DM | 0,8 | 0,5-3,0        | 0,15-0,50 |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG060412-DM | 1,2 | 0,8-3,0        | 0,18-0,60 |                       | ○      | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG06T308-DM | 0,8 | 0,5-3,0        | 0,15-0,15 |                       |        |        |        |        | ○      |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG080404-DM | 0,4 | 0,5-4,0        | 0,1-0,4   |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG080408-DM | 0,8 | 0,5-4,0        | 0,15-0,50 |                       | ○      | ●      |        | ●      | ●      |        | ●      |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG080412-DM | 1,2 | 0,8-4,0        | 0,18-0,60 |                       | ○      | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG080416-DM | 1,6 | 1-4            | 0,23-0,65 |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| <br>Media Lavor. | WNMG080408-EG | 0,8 | 0,5-4,0        | 0,05-0,40 |                       |        |        |        |        |        | ○      | ●      |        |        |                       |         |        |        | ●      | ●               |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG080412-EG | 1,2 | 0,5-4,0        | 0,05-0,60 |                       |        |        |        |        |        | ○      | ●      |        |        |                       |         |        |        | ●      | ●               |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| <br>Media Lavor. | WNMG060404-EM | 0,4 | 0,5-3,0        | 0,05-0,30 |                       |        |        |        |        |        | ○      | ●      |        |        |                       |         |        |        | ●      |                 |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG060408-EM | 0,8 | 0,5-3,0        | 0,1-0,5   |                       |        |        |        |        |        | ●      | ●      |        |        |                       |         |        |        | ●      |                 |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG06T304-EM | 0,4 | 0,5-3,0        | 0,05-0,30 |                       |        |        |        |        |        | ●      |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG06T308-EM | 0,8 | 0,5-3,0        | 0,1-0,5   |                       |        |        |        |        |        | ●      |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG06T312-EM | 1,2 | 0,5-3,0        | 0,1-0,7   |                       |        |        |        |        |        | ○      |        |        |        |                       |         |        |        |        | ○               |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG080404-EM | 0,4 | 1-4            | 0,05-0,30 |                       |        |        |        |        |        |        | ●      | ●      |        |                       |         |        |        | ●      |                 |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG080408-EM | 0,8 | 1-4            | 0,1-0,5   |                       |        |        |        |        |        |        | ●      | ●      |        |                       |         |        |        | ●      |                 |        |        |        |        |        |         |       |       |
|                                                                                                     | WNMG080412-EM | 1,2 | 1-4            | 0,1-0,7   |                       |        |        |        |        |        |        | ●      | ●      |        |                       |         |        |        | ●      |                 |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DWLNRL/L                                                                            | PWLNRL/L                                                                            | MWLNRL/L                                                                            | S***-PWLNRL/L                                                                       |
| Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             |
|  |  |  |  |
| A236                                                                                | A251                                                                                | A266                                                                                | A332                                                                                |

E

Indice

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

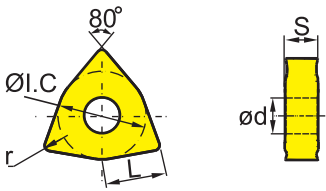
Dati di taglio > A366



## Inserti - Tornitura

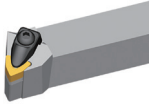
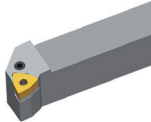
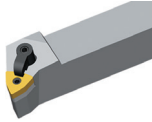
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| WNMG  | L   | I.C   | S    | d    |
|-------|-----|-------|------|------|
| 06 04 | 6,5 | 9,525 | 4,76 | 3,81 |
| 08 04 | 8,7 | 12,7  | 4,76 | 5,16 |

| WN** Inserti negativi                                                                                     |                |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |  |
|-----------------------------------------------------------------------------------------------------------|----------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|--|
|                          |                |     |                |           | P                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |
|                                                                                                           |                |     |                |           | M                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |
|                                                                                                           |                |     |                |           | K                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |
|                                                                                                           |                |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |
|                                                                                                           |                |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |
|                                                                                                           |                |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |
| ISO                                                                                                       |                | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |  |
| PM<br><br>Media Lavor.   | WNMG060408-PM  | 0,8 | 0,5-3,0        | 0,15-0,50 |                       |        | ●      |        | ●      |        |        |        | ●      |        | ●                     |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |
|                                                                                                           | WNMG060412-PM  | 1,2 | 0,8-3,0        | 0,18-0,60 |                       |        | ●      |        | ○      |        |        |        | ○      |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |
|                                                                                                           | WNMG080404-PM  | 0,4 | 0,4-4,0        | 0,12-0,40 |                       |        | ●      |        | ●      |        |        |        | ●      |        | ●                     |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |
|                                                                                                           | WNMG080408-PM  | 0,8 | 0,5-4,0        | 0,15-0,50 |                       |        | ●      |        | ●      | ●      |        |        | ●      |        | ●                     |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |
|                                                                                                           | WNMG080412-PM  | 1,2 | 0,8-4,0        | 0,18-0,60 |                       |        | ●      |        | ●      |        |        |        | ●      |        | ●                     |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |
|                                                                                                           | WNMG080416-PM  | 1,6 | 1-4            | 0,23-0,65 |                       |        |        |        | ●      |        |        |        |        | ●      |                       | ●       |        |        |        |                 |        |        |        |        |        |         |       |       |  |
| ZM<br><br>Media Lavor.  | WNMG080408-ZM  | 0,8 | 0,5-4,0        | 0,1-0,5   | ●                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |
|                                                                                                           | WNMG080412-ZM  | 1,2 | 1,0-5,5        | 0,15-0,60 | ●                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |  |
| SNR<br><br>Sgrossatura | WNMG080408-SNR | 0,8 | 1-3            | 0,1-0,5   |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ○      |        |                 | ●      | ○      |        |        |        |         |       |       |  |
|                                                                                                           | WNMG080412-SNR | 1,2 | 1-3            | 0,2-0,6   |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        | ●      |        |        |         |       |       |  |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DWLNR/L                                                                             | PWLNR/L                                                                             | MWLNR/L                                                                             | S***-PWLNR/L                                                                        |
| Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             |
|  |  |  |  |
| A236                                                                                | A251                                                                                | A266                                                                                | A332                                                                                |

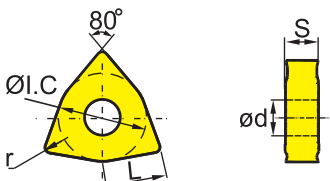
A

Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| WNMG  | L   | I.C  | S    | d    |
|-------|-----|------|------|------|
| 08 04 | 8,7 | 12,7 | 4,76 | 5,16 |

### Inserti - Tornitura

| WN** Inserti negativi                                                             |          | HC <sup>1</sup> (CVD) | HC <sup>1</sup> (PVD) | HT              | HC <sup>2</sup> | HW              |
|-----------------------------------------------------------------------------------|----------|-----------------------|-----------------------|-----------------|-----------------|-----------------|
|  | <b>P</b> | ● ● ● ● ● ● ● ●       | ● ● ● ● ● ● ● ●       | ● ● ● ● ● ● ● ● |                 |                 |
|                                                                                   | <b>M</b> |                       | ● ● ● ● ● ● ● ●       | ● ● ● ● ● ● ● ● |                 |                 |
|                                                                                   | <b>K</b> |                       |                       |                 |                 |                 |
|                                                                                   | <b>N</b> |                       | ● ● ● ● ● ● ● ●       |                 | ● ● ● ● ● ● ● ● |                 |
|                                                                                   | <b>S</b> |                       | ● ● ● ● ● ● ● ●       |                 |                 | ● ● ● ● ● ● ● ● |
|                                                                                   | <b>H</b> |                       |                       |                 |                 |                 |

B

Fresatura

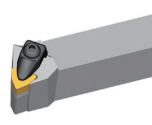
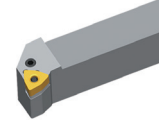
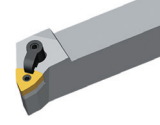
| ISO                                                                                              | r                    | a <sub>p</sub> | f       | YBC103    | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152 | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
|--------------------------------------------------------------------------------------------------|----------------------|----------------|---------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
| <b>NM</b><br>   | <b>WNMG080404-NM</b> | 0,4            | 0,2-3,0 | 0,05-0,30 |        |        |        |        |        |        |        |        |        |        |         |        |        | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                                  | <b>WNMG080408-NM</b> | 0,8            | 0,2-3,0 | 0,1-0,3   |        |        |        |        |        |        |        |        |        |        |         |        |        | ●      | ●      | ○      |        |        |        |        |         |       |       |
|                                                                                                  | <b>WNMG080412-NM</b> | 1,2            | 0,2-4,0 | 0,1-0,4   |        |        |        |        |        |        |        |        |        |        |         |        |        | ●      | ●      |        |        |        |        |        |         |       |       |
| <b>TC</b><br>   | <b>WNMG080404-TC</b> | 0,4            | 0,5-3,0 | 0,08-0,25 |        |        |        |        |        |        |        | ●      |        |        | ○       |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                  | <b>WNMG080408-TC</b> | 0,8            | 0,5-4,0 | 0,15-0,40 |        |        |        |        |        |        |        | ●      |        |        | ●       |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                  | <b>WNMG080412-TC</b> | 1,2            | 0,5-4,0 | 0,2-0,6   |        |        |        |        |        |        |        | ●      |        |        | ●       |        |        |        |        |        |        |        |        |        |         |       |       |
| <b>TK</b><br> | <b>WNMG080408-TK</b> | 0,8            | 0,2-0,4 | 0,2-0,4   |        |        |        |        |        |        |        | ●      |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                  | <b>WNMG080412-TK</b> | 1,2            | 0,2-0,4 | 0,2-0,45  |        |        |        |        |        |        |        | ○      |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                  | <b>WNMG080416-TK</b> | 1,6            | 0,2-0,4 | 0,2-0,5   |        |        |        |        |        |        |        | ○      |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DWLNRL/L                                                                            | PWLNRL/L                                                                            | MWLNRL/L                                                                            | S***-PWLNRL/L                                                                       |
| Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             |
|  |  |  |  |
| A236                                                                                | A251                                                                                | A266                                                                                | A332                                                                                |

E

Indice

Codice sistema > A48

Scelta gradi > A42

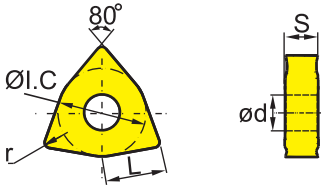
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

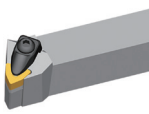
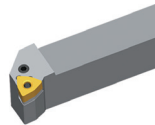
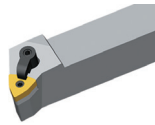
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| WN**  | L   | I.C   | S    | d    |
|-------|-----|-------|------|------|
| 06 T3 | 6,5 | 9,525 | 3,97 | 3,81 |
| 06 04 | 6,5 | 9,525 | 4,76 | 3,81 |
| 08 04 | 8,7 | 12,7  | 4,76 | 5,16 |

| WN** Inserti negativi                                                                                                  |               |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |
|------------------------------------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|
|                                       |               |     |                | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |                       |        | ●       | ●      | ●      | ●      |                 |        |        |        |        |        |         |       |       |
|                                                                                                                        |               |     |                | M                     |        |        |        |        |        | ●      | ●      |        |        |                       | ●      | ●       | ●      | ●      | ●      | ●               | ●      | ●      |        |        |        |         |       |       |
|                                                                                                                        |               |     |                | K                     |        |        |        |        |        |        |        | ●      | ●      | ●                     | ●      |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                        |               |     |                | N                     |        |        |        |        |        |        |        |        |        |                       | ●      | ●       |        |        |        |                 |        |        |        | ●      | ●      |         |       |       |
|                                                                                                                        |               |     |                | S                     |        |        |        |        |        |        |        |        |        |                       |        |         | ●      | ●      | ●      | ●               | ●      |        |        | ●      | ●      |         |       |       |
|                                                                                                                        |               |     |                | H                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| ISO                                                                                                                    |               | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>DR</div>  <div>Sgrossatura</div> | WNMG060408-DR | 0,8 | 0,7-3,5        | 0,20-0,45             |        |        | ●      |        | ●      |        |        |        | ●      |                       | ●      |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                        | WNMG060412-DR | 1,2 | 0,8-3,5        | 0,25-0,55             |        |        | ●      |        | ●      |        |        |        | ○      |                       | ○      |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                        | WNMG080408-DR | 0,8 | 0,7-5,0        | 0,20-0,55             |        |        | ●      |        | ●      | ●      |        |        | ●      |                       | ●      |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                        | WNMG080412-DR | 1,2 | 1-5            | 0,25-0,70             | ○      |        | ●      |        | ●      | ●      |        |        | ●      |                       | ●      |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                        | WNMG080416-DR | 1,6 | 1,5-5,0        | 0,32-0,75             |        |        | ○      |        | ●      |        |        |        | ●      |                       | ○      |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| <div>Flat</div>                      | WNMA060408    | 0,8 | 0,5-3,0        | 0,1-0,3               |        |        |        |        |        |        |        |        | ●      |                       | ●      |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                        | WNMA060412    | 1,2 | 0,5-3,0        | 0,15-0,30             |        |        |        |        |        |        |        |        |        |                       | ●      |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                        | WNMA06T308    | 0,8 | 0,5-3,0        | 0,1-0,3               |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                        | WNMA080404    | 0,4 | 0,5-4,0        | 0,08-0,25             |        |        |        |        |        |        |        |        | ○      |                       | ●      |         | ○      |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                        | WNMA080408    | 0,8 | 0,5-4,0        | 0,15-0,30             |        |        |        |        |        |        |        |        | ●      |                       | ●      |         | ●      |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                        | WNMA080412    | 1,2 | 0,5-5,0        | 0,15-0,30             |        |        |        |        |        |        |        |        | ●      | ○                     | ●      |         | ●      |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                        | WNMA080416    | 1,6 | 0,5-5,0        | 0,2-0,5               |        |        |        |        |        |        |        |        | ○      | ○                     |        | ○       |        |        |        |                 |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DWLNR/L                                                                             | PWLNR/L                                                                             | MWLNR/L                                                                             | S***-PWLNR/L                                                                        |
| Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             |
|  |  |  |  |
| A236                                                                                | A251                                                                                | A266                                                                                | A332                                                                                |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

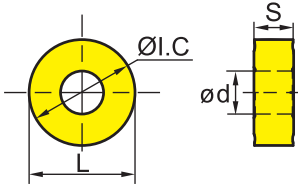
E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| RNMG  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 12 04 | 12,7 | 12,7 | 4,76 | 5,16 |

Inserti - Tornitura

| RN** Inserti negativi                                                             |            |         | HC <sup>1</sup> (CVD) |   |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|------------|---------|-----------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |            |         | P                     | ● | ●      | ●      | ●      | ●      |        |        |        |        |                       |        | ●      | ●       | ●      |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |         | M                     |   |        |        |        |        | ●      | ●      |        |        |                       | ●      | ●      | ●       | ●      | ●               | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |         | K                     |   |        |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |         | N                     |   |        |        |        |        |        |        |        |        |                       | ●      | ●      |         |        |                 |        | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                   |            |         | S                     |   |        |        |        |        |        |        |        |        |                       |        |        | ●       | ●      | ●               | ●      | ●      |        |        |        |        |        |         |       |       |
|                                                                                   |            |         | H                     |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                               |            |         | a <sub>p</sub>        | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| Basic                                                                             | RNMG120400 | 0,5-7,0 | 0,1-1,8               |   |        |        |        |        |        |        |        |        |                       |        | ○      | ○       |        |                 |        |        |        |        |        |        |        |         |       |       |
| Media Lavor.                                                                      |            |         |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |         |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |         |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

C

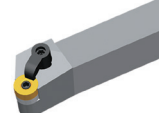
Foratura

D

Informazioni tecniche

E

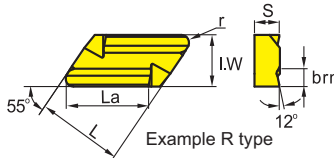
Indice

| Portautensile                                                                       |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| MRDNN                                                                               | MRGNN/L                                                                             |
|  |  |
| A267                                                                                | A268                                                                                |

## Inserti - Tornitura

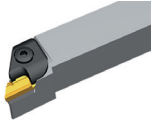
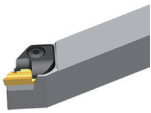
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| KNUX  | L | I.W   | S    |
|-------|---|-------|------|
| 16 04 |   | 9,525 | 4,76 |

| KN** Inserti negativi                                                                                                            |               |    |     |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |         |       |       |   |  |
|----------------------------------------------------------------------------------------------------------------------------------|---------------|----|-----|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|--------|-----------------|--------|--------|--------|--------|---------|-------|-------|---|--|
|                                                 |               |    |     |     |                |           | P                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |  |
|                                                                                                                                  |               |    |     |     |                |           | M                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |  |
|                                                                                                                                  |               |    |     |     |                |           | K                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |  |
|                                                                                                                                  |               |    |     |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |  |
|                                                                                                                                  |               |    |     |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |  |
|                                                                                                                                  |               |    |     |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |  |
| ISO                                                                                                                              |               | La | brn | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320          | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |   |  |
| <div>KNUX</div> <div></div> <div>Finitura</div> | KNUX160405L11 | 16 | 2,2 | 0,5 | 0,2-6,0        | 0,05-0,70 |                       |        |        |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       | ○     |   |  |
|                                                                                                                                  | KNUX160405L12 | 16 | 2,2 | 0,5 | 0,2-6,0        | 0,05-0,70 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |  |
|                                                                                                                                  | KNUX160405R11 | 16 | 2,2 | 0,5 | 0,2-6,0        | 0,05-0,70 |                       |        |        |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       | ○ |  |
|                                                                                                                                  | KNUX160405R12 | 16 | 2,2 | 0,5 | 0,2-6,0        | 0,05-0,70 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |  |
|                                                                                                                                  | KNUX160410L11 | 16 | 2,2 | 1   | 0,2-6,0        | 0,05-0,70 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |  |
|                                                                                                                                  | KNUX160410L12 | 16 | 2,2 | 1   | 0,2-6,0        | 0,05-0,70 |                       |        | ○      |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |  |
|                                                                                                                                  | KNUX160410R11 | 16 | 2,2 | 1   | 0,2-6,0        | 0,05-0,70 |                       |        |        |        | ●      |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |  |
|                                                                                                                                  | KNUX160410R12 | 16 | 2,2 | 1   | 0,2-6,0        | 0,05-0,70 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |                 |        |        |        |        |         |       |       |   |  |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| CKJNR/L                                                                             | CKNNR/L                                                                             |
| Kr: 93°                                                                             | Kr: 63°                                                                             |
|  |  |
| A290                                                                                | A291                                                                                |

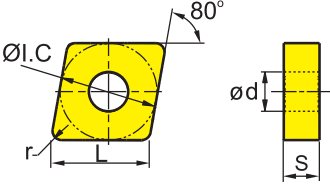
A

Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione  
● Condizioni di lavorazione normali  
● Condizioni di lavorazione sfavorevoli

| CN**  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 19 07 | 19,3 | 19,05 | 7,94 | 7,93 |
| 19 11 | 19,3 | 19,05 | 11   | 7,8  |

| CN** Inserti negativi                                                             |  |  |  | HC <sup>1</sup> (CVD) |   |   |   |   |   |   |   |  |  | HC <sup>1</sup> (PVD) |   | HT | HC <sup>2</sup> | HW |   |
|-----------------------------------------------------------------------------------|--|--|--|-----------------------|---|---|---|---|---|---|---|--|--|-----------------------|---|----|-----------------|----|---|
|  |  |  |  | P                     | ● | ● | ● | ● | ● | ● |   |  |  |                       | ● | ●  | ●               |    |   |
|                                                                                   |  |  |  | M                     |   |   |   |   |   | ● | ● |  |  | ●                     | ● | ●  | ●               |    |   |
|                                                                                   |  |  |  | K                     |   |   |   |   |   |   |   |  |  |                       |   |    |                 |    |   |
|                                                                                   |  |  |  | N                     |   |   |   |   |   |   |   |  |  | ●                     | ● |    |                 | ●  | ● |
|                                                                                   |  |  |  | S                     |   |   |   |   |   |   |   |  |  | ●                     | ● |    |                 | ●  | ● |
|                                                                                   |  |  |  | H                     |   |   |   |   |   |   |   |  |  |                       |   |    |                 |    |   |

B

Fresatura

| ISO         |               | r | a <sub>p</sub> | f         | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152 | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
|-------------|---------------|---|----------------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
| RF          | CNMG191140-RF | 4 | 1,0-5,5        | 0,20-0,60 |        | ●      |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
|             |               |   |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
| Finitura    |               |   |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
|             |               |   |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
| RF          | CNMM190740-RF | 4 | 1,0-5,5        | 0,20-0,60 |        | ●      |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
|             | CNMM191140-RF | 4 | 1,0-5,5        | 0,20-0,60 |        | ●      |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
| Finitura    |               |   |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
|             |               |   |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
| RH          | CNMM190740-RH | 4 | 1,5-7,0        | 0,35-1,20 |        | ●      |        | ●      |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
|             | CNMM191140-RH | 4 | 1,5-7,0        | 0,35-1,20 |        | ●      |        | ●      |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
| Sgrossatura |               |   |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
|             |               |   |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

Portautensile

PCLNR/L

Kr: 95°



A318

E

Indice

Codice sistema > A48

Scelta gradi > A42

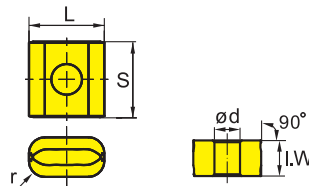
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| LNUX  | L     | I.C | S     | d    |
|-------|-------|-----|-------|------|
| 19 19 | 19,05 | 10  | 19,05 | 6,35 |
| 30 19 | 30    | 10  | 19,05 | 6,35 |

| LN** Inserti negativi                                                                                                            |               |   |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |
|----------------------------------------------------------------------------------------------------------------------------------|---------------|---|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|
| <div></div>                                     |               |   |                | P                     | ●      | ●      | ●      | ●      | ●      |        |        |        |        |                       |        | ●       | ●      | ●      | ●      |                 |        |        |        |        |        |         |       |       |
|                                                                                                                                  |               |   |                | M                     |        |        |        |        |        | ●      | ●      |        |        |                       | ●      | ●       | ●      | ●      | ●      | ●               | ●      |        |        |        |        |         |       |       |
|                                                                                                                                  |               |   |                | K                     |        |        |        |        |        |        |        |        | ●      | ●                     | ●      | ●       |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                                  |               |   |                | N                     |        |        |        |        |        |        |        |        |        |                       | ●      | ●       |        |        |        |                 |        | ●      | ●      |        |        |         |       |       |
|                                                                                                                                  |               |   |                | S                     |        |        |        |        |        |        |        |        |        |                       |        | ●       | ●      | ●      | ●      | ●               |        |        | ●      | ●      |        |         |       |       |
|                                                                                                                                  |               |   |                | H                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| ISO                                                                                                                              |               | r | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>RF</div> <div></div> <div>Alta asp.</div>  | LNUX191940-RF | 4 | 1,0-5,5        | 0,20-0,60             |        |        | ●      |        | ●      |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                                  | LNUX301940-RF | 4 | 1,0-6,0        | 0,20-0,70             |        |        | ●      |        |        | ○      |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                                  |               |   |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| <div>RH</div> <div></div> <div>Alta asp.</div> | LNUX191940-RH | 4 | 1,5-7,0        | 0,35-1,20             |        |        | ●      |        | ●      |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                                  | LNUX301940-RH | 4 | 1,5-8,0        | 0,35-1,40             |        |        | ●      |        | ●      |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                                  |               |   |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |        |        |                 |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| PLANR/L                                                                             | PLFNR/L                                                                             |
| Kr: 90°                                                                             | Kr: 90°                                                                             |
|  |  |
| A316                                                                                | A317                                                                                |

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni tecniche

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Indice

A

Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CCGT  | L   | I.C   | S    | d   |
|-------|-----|-------|------|-----|
| 06 02 | 6,4 | 6,35  | 2,38 | 2,8 |
| 09 T3 | 9,7 | 9,525 | 3,97 | 4,4 |

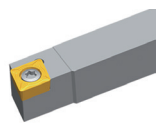
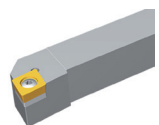
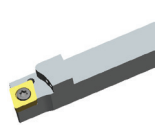
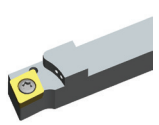
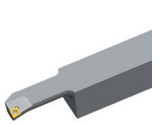
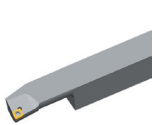
| CC** Inserti positivi |                 |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|-----------------------|-----------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                       |                 |     |                |           | P                     |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                       |                 |     |                |           | M                     |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                       |                 |     |                |           | K                     |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                       |                 |     |                |           | N                     |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                       |                 |     |                |           | S                     |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                       |                 |     |                |           | H                     |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                   |                 | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Finitura          | CCGT060202-SF   | 0,2 | 0,05-2,00      | 0,05-0,18 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        | ●      | ●      |         |       |       |
|                       | CCGT060204-SF   | 0,4 | 0,05-2,00      | 0,05-0,35 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        | ●      | ●      | ●       |       |       |
|                       | CCGT09T304-SF   | 0,4 | 0,05-2,00      | 0,05-0,35 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        | ●      | ●      | ●       |       |       |
|                       |                 |     |                |           |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| <br>Finitura          | CCGT060202L-USF | 0,2 | 0,05-2,00      | 0,05-0,18 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        | ○      |        |        |        |        |        |         |       |       |
|                       | CCGT060204L-USF | 0,4 | 0,05-2,00      | 0,05-0,35 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        | ○      |        |        |        |        |        |         |       |       |
|                       | CCGT09T301L-USF | 0,1 | 0,2-2,0        | 0,01-0,08 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        | ●      |        |        |        |         |       |       |
|                       | CCGT09T302L-USF | 0,2 | 0,2-2,0        | 0,05-0,18 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        | ●      |        |        |        |        |         |       |       |
|                       | CCGT09T304L-USF | 0,4 | 0,2-2,0        | 0,05-0,20 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        | ○      |        |        |        |        |         |       |       |
| USF                   | CCGT09T304R-USF | 0,4 | 0,2-2,0        | 0,05-0,20 |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        | ○      |        |        |        |        |        |         |       |       |
| <br>Finitura          |                 |     |                |           |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                       |                 |     |                |           |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                       |                 |     |                |           |                       |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SCACR/L                                                                             | SCLCR/L                                                                             | SCACR/L-SC                                                                          | SCLCR/L-SC                                                                          | S***-SCLCR/L                                                                         | S***-SCFCR/L                                                                          | S***-SCLCR                                                                            |
| Kr: 90°                                                                             | Kr: 95°                                                                             | Kr: 90°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                              | Kr: 90°                                                                               | Kr: 95°                                                                               |
|  |  |  |  |  |  |  |
| A269                                                                                | A270                                                                                | A306                                                                                | A307                                                                                | A334                                                                                 | A352                                                                                  | A353                                                                                  |

E\*\*\*-SCLCR/L

Kr: 95°



A355

E

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Informazioni tecniche > A501

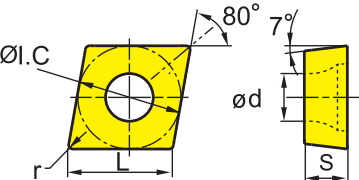
Dati di taglio > A366



## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CCMT  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 06 02 | 6,4  | 6,35  | 2,38 | 2,8  |
| 09 T3 | 9,7  | 9,525 | 3,97 | 4,4  |
| 12 04 | 12,9 | 12,7  | 4,76 | 5,56 |

| CC** Inserti positivi                                                                                                            |                |     |                | HC' (CVD) |        |        |        |        |        |        |        |        |        |        |        | HC' (PVD) |        |        |        |        | HT     | HC <sup>2</sup> | HW     |        |        |         |       |       |   |   |  |
|----------------------------------------------------------------------------------------------------------------------------------|----------------|-----|----------------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|--------|--------|--------|--------|-----------------|--------|--------|--------|---------|-------|-------|---|---|--|
|                                                 |                |     |                | P         | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |        |        |           |        | ●      | ●      |        | ●      |                 |        |        |        |         |       |       |   |   |  |
|                                                                                                                                  |                |     |                | M         |        |        |        |        |        | ●      | ●      |        |        |        |        |           |        |        | ●      | ●      | ●      | ●               | ●      | ●      | ●      | ●       | ●     |       |   |   |  |
|                                                                                                                                  |                |     |                | K         |        |        |        |        |        |        |        | ●      | ●      | ●      | ●      |           |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |  |
|                                                                                                                                  |                |     |                | N         |        |        |        |        |        |        |        |        |        |        |        |           | ●      | ●      |        |        |        |                 |        |        |        |         |       | ●     | ● |   |  |
|                                                                                                                                  |                |     |                | S         |        |        |        |        |        |        |        |        |        |        |        |           |        |        | ●      | ●      | ●      | ●               | ●      | ●      |        |         |       |       | ● | ● |  |
|                                                                                                                                  |                |     |                | H         |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |  |
| ISO                                                                                                                              |                | r   | a <sub>p</sub> | f         | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152 | YBD152C   | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201          | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |   |   |  |
| <div>AHF</div> <div></div> <div>Finitura</div>  | CCMT060204-AHF | 0,4 | 0,2-2,5        | 0,05-0,20 | ●      |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        | ●      | ●               |        | ●      |        |         |       |       |   |   |  |
|                                                                                                                                  | CCMT060208-AHF | 0,8 | 0,3-2,5        | 0,05-0,30 | ○      |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        | ●      |                 |        |        |        |         |       |       |   |   |  |
|                                                                                                                                  | CCMT09T302-AHF | 0,2 | 0,08-2,00      | 0,04-0,15 |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |        |                 |        |        |        | ●       |       |       |   |   |  |
|                                                                                                                                  | CCMT09T304-AHF | 0,4 | 0,2-3,0        | 0,05-0,30 | ●      |        |        |        |        |        |        |        |        |        |        |           |        |        |        | ○      | ●      |                 | ○      |        | ●      |         |       |       |   |   |  |
|                                                                                                                                  | CCMT09T308-AHF | 0,8 | 0,3-3,0        | 0,05-0,40 | ●      |        |        |        |        |        |        |        |        |        |        |           |        |        |        | ○      | ●      |                 |        |        | ●      |         |       |       |   |   |  |
|                                                                                                                                  | CCMT120404-AHF | 0,4 | 0,5-4,0        | 0,05-0,30 | ○      |        |        |        |        |        |        |        |        |        |        |           |        |        |        | ○      | ●      |                 |        |        |        |         |       |       |   |   |  |
|                                                                                                                                  | CCMT120408-AHF | 0,8 | 0,8-4,0        | 0,08-0,40 | ●      |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        | ●      |                 |        |        |        |         |       |       |   |   |  |
| <div>HF</div> <div></div> <div>Finitura</div> | CCMT060202-HF  | 0,2 | 0,06-1,70      | 0,03-0,11 |        | ●      |        | ●      |        |        |        |        |        |        |        |           |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |  |
|                                                                                                                                  | CCMT060204-HF  | 0,4 | 0,1-1,7        | 0,05-0,17 |        | ●      |        | ●      |        |        |        |        |        |        | ○      |           |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |  |
|                                                                                                                                  | CCMT060208-HF  | 0,8 | 0,1-1,7        | 0,05-0,30 |        | ○      |        | ●      |        |        |        |        |        |        |        |           |        |        |        |        |        |                 |        |        |        | ●       |       |       |   |   |  |
|                                                                                                                                  | CCMT09T302-HF  | 0,2 | 0,08-2,00      | 0,04-0,15 |        | ●      |        | ●      |        |        |        |        |        |        |        |           |        |        |        |        |        |                 |        | ○      |        |         |       |       |   |   |  |
|                                                                                                                                  | CCMT09T304-HF  | 0,4 | 0,11-2,00      | 0,06-0,23 |        | ●      |        | ●      |        |        |        |        |        | ○      | ●      |           |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |  |
|                                                                                                                                  | CCMT09T308-HF  | 0,8 | 0,15-2,00      | 0,08-0,30 |        | ●      |        | ●      |        |        |        |        |        | ○      | ●      |           |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |  |
|                                                                                                                                  | CCMT120404-HF  | 0,4 | 0,14-2,40      | 0,07-0,27 |        | ●      |        | ●      |        |        |        |        |        |        |        |           |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |  |
|                                                                                                                                  | CCMT120408-HF  | 0,8 | 0,2-3,0        | 0,08-0,30 |        | ●      |        | ○      |        |        |        |        |        |        |        |           |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |  |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile |         |            |            |              |              |            |
|---------------|---------|------------|------------|--------------|--------------|------------|
| SCACR/L       | SCLCR/L | SCACR/L-SC | SCLCR/L-SC | A***-SCLCR/L | S***-SCFCR/L | S***-SCLCR |
| Kr: 90°       | Kr: 95° | Kr: 90°    | Kr: 95°    | Kr: 95°      | Kr: 90°      | Kr: 95°    |
|               |         |            |            |              |              |            |
| A269          | A270    | A306       | A307       | A334         | A352         | A353       |

E\*\*\*-SCLCR/L  
 Kr: 95°



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Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

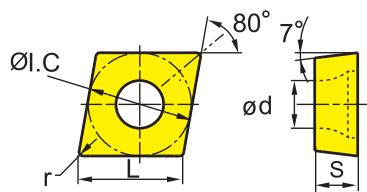
E

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## Inseriti - Tornitura

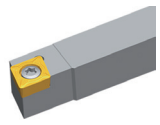
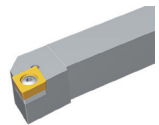
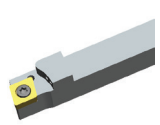
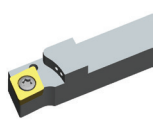
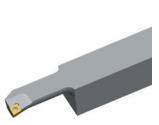
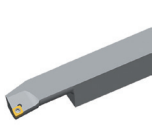
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CCMT  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 06 02 | 6,4  | 6,35  | 2,38 | 2,8  |
| 09 T3 | 9,7  | 9,525 | 3,97 | 4,4  |
| 12 04 | 12,9 | 12,7  | 4,76 | 5,56 |

| CC** Insetti positivi                                                                           |               |     |           |           | HC <sup>1</sup> (CVD) |                |  |   |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------|---------------|-----|-----------|-----------|-----------------------|----------------|--|---|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|--|--|--|--|--|
|                |               |     |           |           | P                     |                |  |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 |               |     |           |           | M                     |                |  |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 |               |     |           |           | K                     |                |  |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 |               |     |           |           | N                     |                |  |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 |               |     |           |           | S                     |                |  |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 |               |     |           |           | H                     |                |  |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |  |  |  |
| ISO                                                                                             |               |     |           |           | r                     | a <sub>p</sub> |  | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |  |  |  |  |  |
| <br>Finitura   | CCMT060202-EF | 0,2 | 0,06-1,70 | 0,03-0,11 |                       |                |  |   |        |        |        |        |        |        | ●      |        |                       |        |        |         |        |                 |        | ●      |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 | CCMT060204-EF | 0,4 | 0,1-1,7   | 0,05-0,17 |                       |                |  |   |        |        |        |        |        |        | ●      |        |                       |        |        |         |        |                 |        | ●      |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 | CCMT09T302-EF | 0,2 | 0,08-2,00 | 0,04-0,15 |                       |                |  |   |        |        |        |        |        |        | ○      |        |                       |        |        |         |        |                 |        | ●      |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 | CCMT09T304-EF | 0,4 | 0,11-2,00 | 0,06-0,23 |                       |                |  |   |        |        |        |        |        |        | ●      |        |                       |        |        |         |        |                 |        | ○      |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 | CCMT09T308-EF | 0,8 | 0,15-2,00 | 0,08-0,30 |                       |                |  |   |        |        |        |        |        |        | ●      |        |                       |        |        |         |        |                 |        | ○      |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 | CCMT120404-EF | 0,4 | 0,14-2,40 | 0,07-0,27 |                       |                |  |   |        |        |        |        |        |        | ●      |        |                       |        |        |         |        |                 |        | ●      |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 | CCMT120408-EF | 0,8 | 0,2-3,0   | 0,1-0,3   |                       |                |  |   |        |        |        |        |        |        | ●      |        |                       |        |        |         |        |                 |        | ●      |        |        |        |        |        |         |       |       |  |  |  |  |  |
| <br>Finitura | CCMT060202-XF | 0,2 | 0,5-1,5   | 0,08-0,15 |                       |                |  |   |        |        | ●      |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 | CCMT060208-XF | 0,8 | 0,5-1,5   | 0,08-0,20 | ●                     |                |  |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 | CCMT09T302-XF | 0,2 | 0,5-2,0   | 0,08-0,15 | ●                     |                |  |   |        |        | ●      |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |  |  |  |
|                                                                                                 | CCMT09T308-XF | 0,8 | 0,5-2,0   | 0,08-0,25 | ●                     |                |  |   |        |        | ○      |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |  |  |  |  |  |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SCACR/L                                                                             | SCLCR/L                                                                             | SCACR/L-SC                                                                          | SCLCR/L-SC                                                                          | A***-SCLCR/L                                                                         | S***-SCFCR/L                                                                          | S***-SCLCR                                                                            |
| Kr: 90°                                                                             | Kr: 95°                                                                             | Kr: 90°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                              | Kr: 90°                                                                               | Kr: 95°                                                                               |
|  |  |  |  |  |  |  |
| A269                                                                                | A270                                                                                | A306                                                                                | A307                                                                                | A334                                                                                 | A352                                                                                  | A353                                                                                  |

E\*\*\*-SCLCR/L  
Kr: 95°



Codice sistema > A48

Scelta gradi > A42

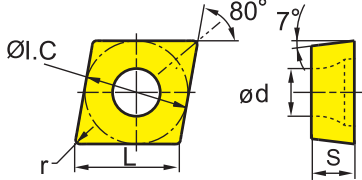
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

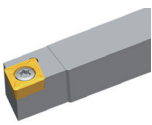
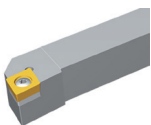
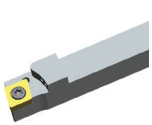
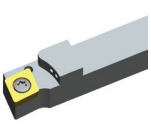
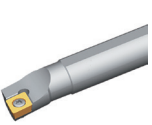
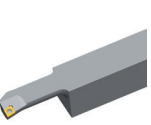
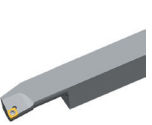
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CCMT  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 06 02 | 6,4  | 6,35  | 2,38 | 2,8  |
| 09 T3 | 9,7  | 9,525 | 3,97 | 4,4  |
| 12 04 | 12,9 | 12,7  | 4,76 | 5,56 |

| CC** Inserti positivi                                                                               |               |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        |        | HT     | HC <sup>2</sup> | HW     |        |        |         |       |       |
|-----------------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|--------|--------|-----------------|--------|--------|--------|---------|-------|-------|
|                    |               |     |                | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |        |        | ●                     | ●      |        | ●      | ●      | ●      |                 |        |        |        |         |       |       |
|                                                                                                     |               |     |                | M                     |        |        |        |        |        | ●      | ●      |        |        |        |        | ●                     | ●      | ●      | ●      | ●      | ●      | ●               | ●      |        |        |         |       |       |
|                                                                                                     |               |     |                | K                     |        |        |        |        |        |        |        | ●      | ●      | ●      | ●      |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
|                                                                                                     |               |     |                | N                     |        |        |        |        |        |        |        |        |        |        |        |                       | ●      | ●      |        |        |        |                 |        |        | ●      | ●       |       |       |
|                                                                                                     |               |     |                | S                     |        |        |        |        |        |        |        |        |        |        |        |                       |        |        | ●      | ●      | ●      | ●               | ●      | ●      |        |         | ●     | ●     |
|                                                                                                     |               |     |                | H                     |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
| ISO                                                                                                 |               | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152 | YBD152C               | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201          | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Media Lavor.   | CCMT060204-EM | 0,4 | 0,2-2,4        | 0,06-0,17             |        |        |        |        |        |        | ●      | ●      |        |        |        |                       |        |        |        | ●      |        |                 |        |        |        |         |       |       |
|                                                                                                     | CCMT060208-EM | 0,8 | 0,4-2,4        | 0,08-0,23             |        |        |        |        |        |        | ●      | ○      |        |        |        |                       |        |        |        | ●      |        |                 |        |        |        |         |       |       |
|                                                                                                     | CCMT09T304-EM | 0,4 | 0,25-3,00      | 0,08-0,23             |        |        |        |        |        |        | ●      | ●      |        |        |        |                       |        |        |        | ●      |        |                 |        |        |        |         |       |       |
|                                                                                                     | CCMT09T308-EM | 0,8 | 0,5-3,0        | 0,1-0,3               |        |        |        |        |        |        | ●      | ●      |        |        |        |                       |        |        |        | ●      |        |                 |        |        |        |         |       |       |
|                                                                                                     | CCMT120404-EM | 0,4 | 0,3-3,6        | 0,09-0,27             |        |        |        |        |        |        |        | ●      |        |        |        |                       |        |        |        | ●      |        |                 |        |        |        |         |       |       |
|                                                                                                     | CCMT120408-EM | 0,8 | 0,6-3,6        | 0,12-0,36             |        |        |        |        |        |        | ●      | ●      |        |        |        |                       |        |        |        | ●      |        |                 |        |        |        |         |       |       |
|                                                                                                     | CCMT120412-EM | 1,2 | 0,72-3,60      | 0,14-0,43             |        |        |        |        |        |        |        |        | ○      |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
| <br>Media Lavor. | CCMT09T304-XM | 0,4 | 1-2,5          | 0,15-0,3              | ●      |        | ○      |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
|                                                                                                     | CCMT09T308-XM | 0,8 | 1-2,5          | 0,15-0,35             | ●      |        | ●      |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
|                                                                                                     | CCMT09T312-XM | 1,2 | 1-2,5          | 0,15-0,4              | ●      |        | ●      |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
|                                                                                                     | CCMT120404-XM | 0,4 | 1-3,0          | 0,15-0,3              | ○      |        | ○      |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
|                                                                                                     | CCMT120408-XM | 0,8 | 1-3,0          | 0,15-0,35             | ○      |        | ○      |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
|                                                                                                     | CCMT120412-XM | 1,2 | 1-3,0          | 0,15-0,4              | ○      |        | ○      |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SCACR/L                                                                             | SCLCR/L                                                                             | SCACR/L-SC                                                                          | SCLCR/L-SC                                                                          | A***-SCLCR/L                                                                         | S***-SCFCR/L                                                                          | S***-SCLCR                                                                            |
| Kr: 90°                                                                             | Kr: 95°                                                                             | Kr: 90°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                              | Kr: 90°                                                                               | Kr: 95°                                                                               |
|  |  |  |  |  |  |  |
| A269                                                                                | A270                                                                                | A306                                                                                | A307                                                                                | A334                                                                                 | A352                                                                                  | A353                                                                                  |

| E***-SCLCR/L                                                                        |
|-------------------------------------------------------------------------------------|
| Kr: 95°                                                                             |
|  |
| A355                                                                                |

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366



A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

E

Indice

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CCMT  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 06 02 | 6,4  | 6,35  | 2,38 | 2,8  |
| 09 T3 | 9,7  | 9,525 | 3,97 | 4,4  |
| 12 04 | 12,9 | 12,7  | 4,76 | 5,56 |

| CC** Inserti positivi                             |               |     |           |           | HC <sup>1</sup> (CVD) |   |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|---------------------------------------------------|---------------|-----|-----------|-----------|-----------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                                                   |               |     |           |           | P                     | ● | ●      | ●      | ●      | ●      | ●      |        |        |        |                       | ●      | ●      |         | ●      | ●               |        |        |        |        |        |        |        |         |       |       |
|                                                   |               |     |           |           | M                     |   |        |        |        |        | ●      | ●      |        |        |                       | ●      | ●      | ●       | ●      | ●               | ●      | ●      | ●      |        |        |        |        |         |       |       |
|                                                   |               |     |           |           | K                     |   |        |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                   |               |     |           |           | N                     |   |        |        |        |        |        |        |        |        |                       |        | ●      | ●       |        |                 |        |        |        |        |        | ●      | ●      |         |       |       |
|                                                   |               |     |           |           | S                     |   |        |        |        |        |        |        |        |        |                       |        |        | ●       | ●      | ●               | ●      | ●      |        |        |        | ●      | ●      |         |       |       |
|                                                   |               |     |           |           | H                     |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                               |               |     |           | r         | a <sub>p</sub>        | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>HM</div> <div></div> <div>Media Lavor.</div> | CCMT060204-HM | 0,4 | 0,2-2,4   | 0,06-0,17 |                       |   | ●      |        | ●      |        |        |        | ●      | ●      |                       |        | ●      |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                   | CCMT060208-HM | 0,8 | 0,2-3,0   | 0,08-0,20 |                       |   | ●      |        | ●      |        |        |        |        |        | ●                     |        |        | ●       |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                   | CCMT09T304-HM | 0,4 | 0,25-3,00 | 0,08-0,23 |                       |   | ●      |        | ●      |        |        |        |        | ●      | ●                     |        |        | ●       |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                   | CCMT09T308-HM | 0,8 | 0,5-3,0   | 0,1-0,3   |                       |   | ●      |        | ●      |        |        |        |        | ●      | ●                     |        |        | ●       |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                   | CCMT120404-HM | 0,4 | 0,3-3,6   | 0,09-0,27 |                       |   | ●      |        | ●      |        |        |        |        |        |                       | ○      |        | ●       |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                   | CCMT120408-HM | 0,8 | 0,6-3,6   | 0,12-0,36 |                       |   | ●      |        | ●      |        |        |        |        |        |                       | ●      |        | ●       |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                   | CCMT120412-HM | 1,2 | 0,72-3,60 | 0,14-0,43 |                       |   | ●      |        | ○      |        |        |        |        |        |                       | ○      |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |            |            |              |              |            |
|---------------|---------|------------|------------|--------------|--------------|------------|
| SCACR/L       | SCLCR/L | SCACR/L-SC | SCLCR/L-SC | A***-SCLCR/L | S***-SCFCR/L | S***-SCLCR |
| Kr: 90°       | Kr: 95° | Kr: 90°    | Kr: 95°    | Kr: 95°      | Kr: 90°      | Kr: 95°    |
|               |         |            |            |              |              |            |
| A269          | A270    | A306       | A307       | A334         | A352         | A353       |
| E***-SCLCR/L  |         |            |            |              |              |            |
| Kr: 95°       |         |            |            |              |              |            |
|               |         |            |            |              |              |            |
| A355          |         |            |            |              |              |            |

Codice sistema > A48

Scelta gradi > A42

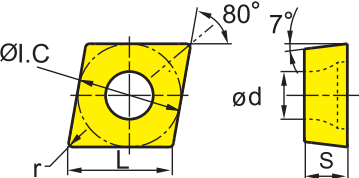
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CC**  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 06 02 | 6,4  | 6,35  | 2,38 | 2,8  |
| 09 T3 | 9,7  | 9,525 | 3,97 | 4,4  |
| 12 04 | 12,9 | 12,7  | 4,76 | 5,56 |

| CC** Inserti positivi                                                                      |               |     |                |           | HC' (CVD) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | HC' (PVD)                                                                           |                                                                                     |                                                                                     |                                                                                     |                                                                                     | HT                                                                                  |                                                                                     | HC <sup>2</sup>                                                                     | HW                                                                                  |         |       |                                                                                     |                                                                                     |                                                                                     |  |
|--------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------|-----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|           |               |     |                |           | P         |  |  |  |  |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |  |  |                                                                                     |  |  |  |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                            |               |     |                |           | M         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |  |  |  |         |       |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                            |               |     |                |           | K         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                            |               |     |                |           | N         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |  |  |                                                                                     |  |
|                                                                                            |               |     |                |           | S         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |  |                                                                                     |         |       |                                                                                     |  |  |  |
|                                                                                            |               |     |                |           | H         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
| ISO                                                                                        |               | r   | a <sub>p</sub> | f         | YBC103    | YB6315                                                                            | YBC152                                                                            | YBC203                                                                            | YBC252                                                                            | YBC352                                                                            | YBM153                                                                            | YBM253                                                                            | YBD102                                                                            | YB7315                                                                            | YBD152                                                                              | YBD152C                                                                             | YBG101                                                                              | YBG102                                                                              | YBG105                                                                              | YBG205                                                                              | YB9320                                                                              | YPD201                                                                              | YBS103                                                                              | YNG151                                                                              | YNT251                                                                              | YNG151C | YD101 | YD201                                                                               |                                                                                     |                                                                                     |  |
| <br>Basic | CCMW09T304    | 0,4 | 0,1-5,0        | 0,05-0,50 |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         | ○     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                            | CCMW120404    | 0,4 | 0,2-5,0        | 0,05-0,50 |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         | ○     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                            | CCMW120408    | 0,8 | 0,5-5,0        | 0,08-0,50 |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
| Media Lavor.                                                                               |               |     |                |           |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
| <br>TC   | CCMT060204-TC | 0,4 | 0,5-3,0        | 0,1-0,3   |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ○                                                                                 |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                            | CCMT09T304-TC | 0,4 | 0,5-3,0        | 0,1-0,3   |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ○                                                                                 |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                            | CCMT09T308-TC | 0,8 | 0,5-3,0        | 0,1-0,4   |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                            | CCMT120404-TC | 0,4 | 1-4            | 0,1-0,3   |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                            | CCMT120408-TC | 0,8 | 1-4            | 0,1-0,4   |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
| Media Lavor.                                                                               |               |     |                |           |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
| <br>HR  | CCMT060204-HR | 0,4 | 0,5-3,0        | 0,05-0,24 |           | ●                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                            | CCMT060208-HR | 0,8 | 0,8-3,2        | 0,09-0,26 |           | ●                                                                                 |                                                                                   | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                            | CCMT09T304-HR | 0,4 | 0,2-4,0        | 0,05-0,30 |           | ●                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ●                                                                                   |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                            | CCMT09T308-HR | 0,8 | 1-4            | 0,12-0,35 |           | ●                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 | ●                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                            | CCMT120408-HR | 0,8 | 1,2-4,8        | 0,14-0,42 |           | ●                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 | ●                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                            | CCMT120412-HR | 1,2 | 1,44-4,80      | 0,17-0,50 |           | ●                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ○                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |
| Sgrossatura                                                                                |               |     |                |           |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |         |       |                                                                                     |                                                                                     |                                                                                     |  |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |            |            |              |              |            |
|---------------|---------|------------|------------|--------------|--------------|------------|
| SCACR/L       | SCLCR/L | SCACR/L-SC | SCLCR/L-SC | A***-SCLCR/L | S***-SCFCR/L | S***-SCLCR |
| Kr: 90°       | Kr: 95° | Kr: 90°    | Kr: 95°    | Kr: 95°      | Kr: 90°      | Kr: 95°    |
|               |         |            |            |              |              |            |
| A269          | A270    | A306       | A307       | A334         | A352         | A353       |
| E***-SCLCR/L  |         |            |            |              |              |            |
| Kr: 95°       |         |            |            |              |              |            |
|               |         |            |            |              |              |            |
| A355          |         |            |            |              |              |            |

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A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

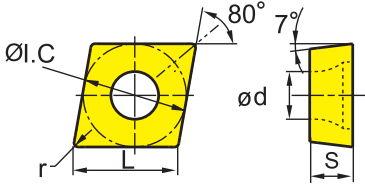
E

Indice

## Inseriti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CCGX  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 06 02 | 6,4  | 6,35  | 2,38 | 2,8  |
| 09 T3 | 9,7  | 9,525 | 3,97 | 4,4  |
| 12 04 | 12,9 | 12,7  | 4,76 | 5,56 |

| CC** Insetti positivi                                                                                                        |               |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |
|------------------------------------------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|
|                                             |               |     |                |           | P                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                              |               |     |                |           | M                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                              |               |     |                |           | K                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                              |               |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                              |               |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                                                              |               |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| ISO                                                                                                                          |               | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>LC</div>  <div>Lavorazione Al.</div>   | CCGX060202-LC | 0,2 | 0,3-3,0        | 0,05-0,15 |                       |        |        |        |        |        |        |        |        |        |                       |         | ●      |        |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX060204-LC | 0,4 | 0,5-3,0        | 0,1-0,3   |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX09T302-LC | 0,2 | 0,5-4,0        | 0,1-0,2   |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX09T304-LC | 0,4 | 0,5-5,0        | 0,1-0,3   |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX09T308-LC | 0,8 | 0,5-5,0        | 0,15-0,60 |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX120404-LC | 0,4 | 0,5-7,0        | 0,1-0,3   |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX120408-LC | 0,8 | 0,5-7,0        | 0,15-0,60 |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        |                 |        |        |        |        |        |         | ●     |       |
| <div>LH</div>  <div>Lavorazione Al.</div> | CCGX060202-LH | 0,2 | 0,3-3,0        | 0,05-0,15 |                       |        |        |        |        |        |        |        |        |        |                       |         | ●      |        |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX060204-LH | 0,4 | 0,5-3,0        | 0,1-0,3   |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX060208-LH | 0,8 | 0,6-3,0        | 0,15-0,40 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX09T302-LH | 0,2 | 0,4-5,0        | 0,05-0,15 |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX09T304-LH | 0,4 | 0,5-5,0        | 0,1-0,3   |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX09T308-LH | 0,8 | 0,5-5,0        | 0,15-0,60 |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX120402-LH | 0,2 | 0,4-7,0        | 0,05-0,15 |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ○      |        |                 |        |        |        |        |        | ○       |       |       |
|                                                                                                                              | CCGX120404-LH | 0,4 | 0,5-7,0        | 0,1-0,3   |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX120408-LH | 0,8 | 0,5-7,0        | 0,15-0,60 |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ●      |        |                 |        |        |        |        |        |         | ●     |       |
|                                                                                                                              | CCGX120412-LH | 1,2 | 0,5-7,0        | 0,15-0,80 |                       |        |        |        |        |        |        |        |        |        |                       |         |        | ○      |        |                 |        |        |        |        |        |         | ●     |       |

● In magazzino ○ Su richiesta

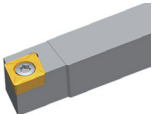
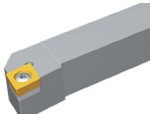
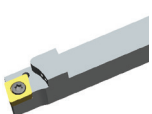
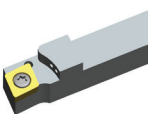
HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

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| Portautensile                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SCACR/L                                                                           | SCLCR/L                                                                           | SCACR/L-SC                                                                        | SCLCR/L-SC                                                                        | A***-SCLCR/L                                                                       | S***-SCFCR/L                                                                        | S***-SCLCR                                                                          |
| Kr: 90°                                                                           | Kr: 95°                                                                           | Kr: 90°                                                                           | Kr: 95°                                                                           | Kr: 95°                                                                            | Kr: 90°                                                                             | Kr: 95°                                                                             |
|  |  |  |  |  |  |  |
| A269                                                                              | A270                                                                              | A306                                                                              | A307                                                                              | A334                                                                               | A352                                                                                | A353                                                                                |

**E\*\*\*-SCLCR/L**  
Kr: 95°



A355

**A**

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A

Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CP**  | L   | I.C   | S    | d   |
|-------|-----|-------|------|-----|
| 06 02 | 6,4 | 6,35  | 2,38 | 2,8 |
| 09 T3 | 9,7 | 9,525 | 3,97 | 4,4 |

| CP** Inserti positivi |  |  |  | HC <sup>1</sup> (CVD) |   |   |   |   |   |   |   |  |  | HC <sup>1</sup> (PVD) |   | HT | HC <sup>2</sup> | HW |
|-----------------------|--|--|--|-----------------------|---|---|---|---|---|---|---|--|--|-----------------------|---|----|-----------------|----|
|                       |  |  |  | P                     | ● | ● | ● | ● | ● | ● |   |  |  | ●                     | ● | ●  |                 |    |
|                       |  |  |  | M                     |   |   |   |   |   | ● | ● |  |  | ●                     | ● | ●  | ●               |    |
|                       |  |  |  | K                     |   |   |   |   |   |   |   |  |  |                       |   |    |                 |    |
|                       |  |  |  | N                     |   |   |   |   |   |   |   |  |  | ●                     | ● |    | ●               | ●  |
|                       |  |  |  | S                     |   |   |   |   |   |   |   |  |  | ●                     | ● |    | ●               | ●  |
|                       |  |  |  | H                     |   |   |   |   |   |   |   |  |  |                       |   |    |                 |    |

B

Fresatura

| ISO          |               | r   | a <sub>p</sub> | f         | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152 | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
|--------------|---------------|-----|----------------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
| HF           | CPMT060204-HF | 0,4 | 0,1-1,5        | 0,04-0,18 |        |        | ○      |        |        |        |        |        |        |        | ○      |         |        |        |        | ○      |        |        |        |        |        |         |       |       |
|              | CPMT060208-HF | 0,8 | 0,1-1,5        | 0,05-0,25 |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        | ○      |        |        |        |        |        |         |       |       |
|              |               |     |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
| SF           | CPGT060202-SF | 0,2 | 0,05-2,00      | 0,05-0,25 |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        | ○      | ○      |         |       |       |
|              | CPGT060204-SF | 0,4 | 0,05-2,00      | 0,05-0,35 |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        | ●      | ●      |         |       |       |
|              | CPGT09T304-SF | 0,4 | 0,05-2,00      | 0,05-0,35 |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        | ●      | ●      |         |       |       |
| Flat         | CPGW060204    | 0,4 | 0,5-1,5        | 0,05-0,40 |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        | ○       |       |       |
|              |               |     |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
|              |               |     |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
| HM           | CPMT09T304-HM | 0,4 | 0,2-3,5        | 0,05-0,35 |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        | ●      |        |        |        |        |        |         |       |       |
|              | CPMT09T308-HM | 0,8 | 0,2-3,5        | 0,10-0,55 |        |        |        |        | ○      |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
|              |               |     |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
| Media Lavor. |               |     |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
|              |               |     |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |
|              |               |     |                |           |        |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

| Portautensile |              |
|---------------|--------------|
| S***-SCLPR/L  | C***-SCLPR/L |
| Kr: 95°       | Kr: 95°      |
|               |              |
| A348          | A354         |

E

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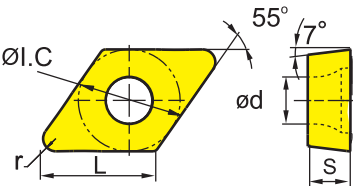
Dati di taglio > A366



## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DC**  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 07 02 | 7,8  | 6,35  | 2,38 | 2,8 |
| 11 T3 | 11,6 | 9,525 | 3,97 | 4,4 |

| DC** Inserti positivi                                                             |                |     |           |           | HC <sup>1</sup> (CVD) |   |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |         |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|----------------|-----|-----------|-----------|-----------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |                |     |           |           | P                     | ● | ●      | ●      | ●      | ●      | ●      |        |        |        |                       |        | ●      | ●       | ●      |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |           |           | M                     |   |        |        |        |        |        | ●      | ●      |        |                       | ●      | ●      | ●       | ●      | ●      | ●               | ●      |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |           |           | K                     |   |        |        |        |        |        |        |        | ●      | ●                     | ●      | ●      |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |           |           | N                     |   |        |        |        |        |        |        |        |        |                       |        | ●      | ●       |        |        |                 |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                   |                |     |           |           | S                     |   |        |        |        |        |        |        |        |        |                       |        |        | ●       | ●      | ●      | ●               | ●      |        | ●      | ●      |        |        |         |       |       |
|                                                                                   |                |     |           |           | H                     |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                                                                               |                |     |           | r         | a <sub>p</sub>        | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152 | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| AHF                                                                               | DCMT070204-AHF | 0,4 | 0,2-2,5   | 0,05-0,20 | ○                     |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 | ○      | ●      |        |        | ●      |        |         |       |       |
|                                                                                   | DCMT11T302-AHF | 0,2 | 0,5-3,0   | 0,05-0,15 | ○                     |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 | ●      | ●      |        |        | ●      | ●      |         |       |       |
|                                                                                   | DCMT11T304-AHF | 0,4 | 0,5-3,0   | 0,05-0,30 | ●                     |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 | ●      | ●      |        |        | ●      |        |         |       |       |
|                                                                                   | DCMT11T308-AHF | 0,8 | 0,5-3,0   | 0,05-0,40 | ●                     |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        | ●      |        |        | ●      | ●      |         |       |       |
| Finitura                                                                          |                |     |           |           |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| SF                                                                                | DCGT070202-SF  | 0,2 | 0,05-1,50 | 0,05-0,15 |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        | ●      | ●      | ○       |       |       |
|                                                                                   | DCGT070204-SF  | 0,4 | 0,05-1,50 | 0,05-0,20 |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        | ○      |        | ●       |       |       |
|                                                                                   | DCGT070208-SF  | 0,8 | 0,05-1,50 | 0,05-0,30 |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        | ●       |       |       |
|                                                                                   | DCGT11T302-SF  | 0,2 | 0,05-2,00 | 0,05-0,15 |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        | ○               |        |        |        |        | ○      | ●      | ●       |       |       |
|                                                                                   | DCGT11T304-SF  | 0,4 | 0,05-2,00 | 0,05-0,20 |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        | ●      | ●      | ●       |       |       |
|                                                                                   | DCGT11T308-SF  | 0,8 | 0,05-2,00 | 0,05-0,30 |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        | ●      | ●      |         |       |       |
| Finitura                                                                          |                |     |           |           |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |            |            |             |            |            |
|---------------|---------|------------|------------|-------------|------------|------------|
| SDACR/L       | SDJCR/L | SDNCN      | SDACR/L-SC | SDHCR/L-SC  | SDJCR/L-SC | SDNCN-SC   |
| Kr: 90°       | Kr: 93° | Kr: 62°30' | Kr: 90°    | Kr: 107°30' | Kr: 93°    | Kr: 62°30' |
|               |         |            |            |             |            |            |
| A271          | A272    | A273       | A308       | A309        | A310       | A311       |

| S***-SDQCR/L | A***-SDUCR/L | S***-SDZCR/L | E***-SDQCR/L |
|--------------|--------------|--------------|--------------|
| Kr: 107°30'  | Kr: 93°      | Kr: 85°      | Kr: 107°30'  |
|              |              |              |              |
| A336         | A337         | A338         | A357         |

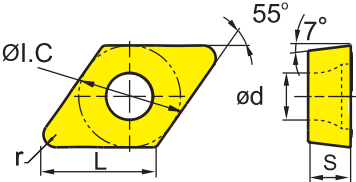
A

Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DCMT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 07 02 | 7,8  | 6,35  | 2,38 | 2,8 |
| 11 T3 | 11,6 | 9,525 | 3,97 | 4,4 |

| DC** Inserti positivi                                                             |               |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|---------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |               |     |                |           | P                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |                |           | M                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |                |           | K                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                                                                               |               | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| EF                                                                                | DCMT070202-EF | 0,2 | 0,06-1,50      | 0,03-0,11 |                       |        |        |        |        |        | ○      |        |        |        |                       |         |        |        |                 | ○      |        |        |        |        |        |         |       |       |
|                                                                                   | DCMT070204-EF | 0,4 | 0,08-1,50      | 0,05-0,17 |                       |        |        |        |        |        | ●      |        |        |        |                       |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
| Finitura                                                                          | DCMT11T302-EF | 0,2 | 0,08-2,00      | 0,04-0,15 |                       |        |        |        |        |        | ○      |        |        |        |                       |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                   | DCMT11T304-EF | 0,4 | 0,11-2,00      | 0,06-0,23 |                       |        |        |        |        |        | ●      |        |        |        |                       |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                   | DCMT11T308-EF | 0,8 | 0,15-2,00      | 0,08-0,30 |                       |        |        |        |        |        | ●      |        |        |        |                       |         |        |        |                 | ●      | ●      |        |        |        |        |         |       |       |
| HF                                                                                | DCMT070202-HF | 0,2 | 0,06-1,50      | 0,03-0,11 |                       |        | ○      |        | ●      |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   | DCMT070204-HF | 0,4 | 0,08-1,50      | 0,05-0,17 |                       |        | ●      |        | ●      |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| Finitura                                                                          | DCMT070208-HF | 0,8 | 0,08-1,50      | 0,05-0,30 |                       |        | ●      |        | ○      |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   | DCMT11T302-HF | 0,2 | 0,08-2,00      | 0,04-0,15 |                       |        | ○      |        | ●      |        |        |        |        |        |                       |         |        |        |                 | ○      |        |        |        |        |        |         |       |       |
|                                                                                   | DCMT11T304-HF | 0,4 | 0,11-2,00      | 0,06-0,23 |                       |        | ●      |        | ●      |        |        |        |        | ○      |                       | ●       |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   | DCMT11T308-HF | 0,8 | 0,15-2,00      | 0,08-0,30 |                       |        | ●      |        | ●      |        |        |        |        | ●      |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| XF                                                                                | DCMT070202-XF | 0,2 | 0,5-1,5        | 0,08-0,15 |                       |        |        | ○      |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   | DCMT070204-XF | 0,4 | 0,5-1,5        | 0,08-0,15 | ○                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| Finitura                                                                          | DCMT070208-XF | 0,8 | 0,5-1,5        | 0,08-0,25 | ○                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   | DCMT11T304-XF | 0,4 | 0,5-2,0        | 0,08-0,15 | ○                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   | DCMT11T308-XF | 0,8 | 0,5-2,0        | 0,08-0,25 | ○                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |                 |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

| Portautensile |         |            |            |             |            |            |
|---------------|---------|------------|------------|-------------|------------|------------|
| SDACR/L       | SDJCR/L | SDNCN      | SDACR/L-SC | SDHCR/L-SC  | SDJCR/L-SC | SDNCN-SC   |
| Kr: 90°       | Kr: 93° | Kr: 62°30' | Kr: 90°    | Kr: 107°30' | Kr: 93°    | Kr: 62°30' |
|               |         |            |            |             |            |            |
| A271          | A272    | A273       | A308       | A309        | A310       | A311       |

E

Indice

| S***-SDQCR/L | A***-SDUCR/L | S***-SDZCR/L | E***-SDQCR/L |
|--------------|--------------|--------------|--------------|
| Kr: 107°30'  | Kr: 93°      | Kr: 85°      | Kr: 107°30'  |
|              |              |              |              |
| A336         | A337         | A338         | A357         |

Codice sistema > A48

Scelta gradi > A42

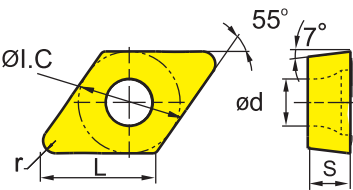
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DCMT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 07 02 | 7,8  | 6,35  | 2,38 | 2,8 |
| 11 T3 | 11,6 | 9,525 | 3,97 | 4,4 |

| DC** Inserti positivi                                                                             |               |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        | HT     |        | HC <sup>2</sup> |        | HW     |        |         |       |       |   |   |
|---------------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|--------|--------|-----------------|--------|--------|--------|---------|-------|-------|---|---|
|                  |               |     |                | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |        |        |                       | ●      | ●      | ●      |        |        |                 |        |        |        |         |       |       |   |   |
|                                                                                                   |               |     |                | M                     |        |        |        |        |        |        | ●      | ●      |        |        |        |                       |        |        | ●      | ●      | ●      | ●               | ●      | ●      | ●      | ●       | ●     |       |   |   |
|                                                                                                   |               |     |                | K                     |        |        |        |        |        |        |        |        | ●      | ●      | ●      | ●                     |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |
|                                                                                                   |               |     |                | N                     |        |        |        |        |        |        |        |        |        |        |        |                       |        | ●      | ●      |        |        |                 |        |        |        |         |       | ●     | ● |   |
|                                                                                                   |               |     |                | S                     |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        | ●      | ●      | ●               | ●      | ●      | ●      |         |       |       | ● | ● |
|                                                                                                   |               |     |                | H                     |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |
| ISO                                                                                               |               | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152 | YBD152C               | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201          | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |   |   |
| <br>Media Lavor. | DCMT070204-EM | 0,4 | 0,19-2,25      | 0,06-0,17             |        |        |        |        |        |        | ●      | ●      |        |        |        |                       |        |        |        | ●      |        |                 |        |        |        |         |       |       |   |   |
|                                                                                                   | DCMT070208-EM | 0,8 | 0,38-2,25      | 0,08-0,23             |        |        |        |        |        |        | ●      | ○      |        |        |        |                       |        |        |        | ●      |        |                 |        |        |        |         |       |       |   |   |
|                                                                                                   | DCMT11T304-EM | 0,4 | 0,25-3,00      | 0,08-0,23             |        |        |        |        |        |        | ●      | ●      |        |        |        |                       |        |        |        | ●      |        |                 |        |        |        |         |       |       |   |   |
|                                                                                                   | DCMT11T308-EM | 0,8 | 0,5-3,0        | 0,1-0,3               |        |        |        |        |        |        | ●      | ●      |        |        |        |                       |        |        |        | ●      |        |                 |        |        |        |         |       |       |   |   |
| <br>Media Lavor. | DCMT11T304-XM | 0,4 | 1-2,5          | 0,15-0,3              | ●      |        | ○      |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |
|                                                                                                   | DCMT11T308-XM | 0,8 | 1-2,5          | 0,15-0,35             | ●      |        | ●      |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |
|                                                                                                   | DCMT11T312-XM | 1,2 | 1-2,5          | 0,15-0,4              | ●      |        | ●      |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |
|                                                                                                   |               |     |                |                       |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |   |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |            |            |             |            |            |
|---------------|---------|------------|------------|-------------|------------|------------|
| SDACR/L       | SDJCR/L | SDNCN      | SDACR/L-SC | SDHCR/L-SC  | SDJCR/L-SC | SDNCN-SC   |
| Kr: 90°       | Kr: 93° | Kr: 62°30' | Kr: 90°    | Kr: 107°30' | Kr: 93°    | Kr: 62°30' |
|               |         |            |            |             |            |            |
| A271          | A272    | A273       | A308       | A309        | A310       | A311       |

| S***-SDQCR/L | A***-SDUCR/L | S***-SDZCR/L | E***-SDQCR/L |
|--------------|--------------|--------------|--------------|
| Kr: 107°30'  | Kr: 93°      | Kr: 85°      | Kr: 107°30'  |
|              |              |              |              |
| A336         | A337         | A338         | A357         |

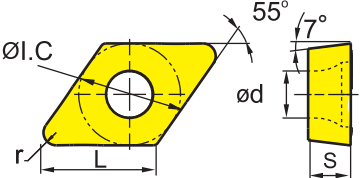
A

Tornitura

### Inseriti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DCMT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 07 02 | 7,8  | 6,35  | 2,38 | 2,8 |
| 11 T3 | 11,6 | 9,525 | 3,97 | 4,4 |

| DC** Inserti positivi                                                                             |               |  |  | HC <sup>1</sup> (CVD) |                |           |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |        |         |       |       |
|---------------------------------------------------------------------------------------------------|---------------|--|--|-----------------------|----------------|-----------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                  |               |  |  | P                     | ●              | ●         | ●      | ●      | ●      | ●      |        |        |        | ●                     | ●      | ●      |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                   |               |  |  | M                     |                |           |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●      | ●               | ●      | ●      |        |        |        |        |        |        |        |         |       |       |
|                                                                                                   |               |  |  | K                     |                |           |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                   |               |  |  | N                     |                |           |        |        |        |        |        |        |        | ●                     | ●      |        |                 |        | ●      | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                                   |               |  |  | S                     |                |           |        |        |        |        |        |        |        | ●                     | ●      | ●      | ●               | ●      |        | ●      | ●      |        |        |        |        |        |         |       |       |
|                                                                                                   |               |  |  | H                     |                |           |        |        |        |        |        |        |        |                       |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                               |               |  |  | r                     | a <sub>p</sub> | f         | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YBD152 | YBD152C         | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Media Lavor. | DCMT070204-HM |  |  | 0,4                   | 0,19-2,25      | 0,06-0,17 | ○      | ●      |        |        | ●      |        |        |                       | ●      | ●      |                 |        |        |        | ●      |        |        |        |        |        |         |       |       |
|                                                                                                   | DCMT070208-HM |  |  | 0,8                   | 0,38-2,25      | 0,08-0,23 |        |        | ●      | ●      |        |        |        |                       | ●      | ●      |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                   | DCMT11T304-HM |  |  | 0,4                   | 0,25-3,00      | 0,08-0,23 | ○      | ●      |        |        | ●      |        |        |                       |        | ●      | ●               |        |        |        |        | ●      |        |        |        |        |         |       |       |
|                                                                                                   | DCMT11T308-HM |  |  | 0,8                   | 0,5-3,0        | 0,1-0,3   |        |        | ●      | ●      |        |        |        |                       | ●      | ●      |                 |        |        |        |        | ●      |        |        |        |        |         |       |       |
|                                                                                                   | DCMT11T312-HM |  |  | 1,2                   | 0,6-3,0        | 0,12-0,36 |        |        |        |        |        | ○      |        |                       |        | ○      | ○               |        |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

B

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E

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|---------------|---------|------------|------------|-------------|------------|------------|
| SDACR/L       | SDJCR/L | SDNCN      | SDACR/L-SC | SDHCR/L-SC  | SDJCR/L-SC | SDNCN-SC   |
| Kr: 90°       | Kr: 93° | Kr: 62°30' | Kr: 90°    | Kr: 107°30' | Kr: 93°    | Kr: 62°30' |
|               |         |            |            |             |            |            |
| A271          | A272    | A273       | A308       | A309        | A310       | A311       |

| S***-SDQCR/L | A***-SDUCR/L | S***-SDZCR/L | E***-SDQCR/L |
|--------------|--------------|--------------|--------------|
| Kr: 107°30'  | Kr: 93°      | Kr: 85°      | Kr: 107°30'  |
|              |              |              |              |
| A336         | A337         | A338         | A357         |

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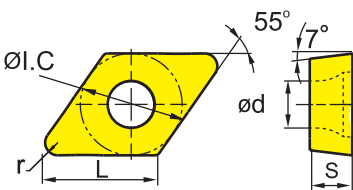
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## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DC**  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 07 02 | 7,8  | 6,35  | 2,38 | 2,8 |
| 11 T3 | 11,6 | 9,525 | 3,97 | 4,4 |

| DC** Inserti positivi                                                             |  |  |  |  | HC <sup>1</sup> (CVD) |  |  |  |  |  |  |  |  |  | HC <sup>1</sup> (PVD) |  |  |  |  | HT |  | HC <sup>2</sup> | HW |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|--|--|--|--|-----------------------|--|--|--|--|--|--|--|--|--|-----------------------|--|--|--|--|----|--|-----------------|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  | <b>P</b>              |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |    |  |                 |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |              |              |              |             |            |            |
|---------------|--------------|--------------|--------------|-------------|------------|------------|
| SDACR/L       | SDJCR/L      | SDNCN        | SDACR/L-SC   | SDHCR/L-SC  | SDJCR/L-SC | SDNCN-SC   |
| Kr: 90°       | Kr: 93°      | Kr: 62°30'   | Kr: 90°      | Kr: 107°30' | Kr: 93°    | Kr: 62°30' |
|               |              |              |              |             |            |            |
| A271          | A272         | A273         | A308         | A309        | A310       | A311       |
| S***-SDQCR/L  | A***-SDUCR/L | S***-SDZCR/L | E***-SDQCR/L |             |            |            |
| Kr: 107°30'   | Kr: 93°      | Kr: 85°      | Kr: 107°30'  |             |            |            |
|               |              |              |              |             |            |            |
| A336          | A337         | A338         | A357         |             |            |            |

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A

Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DCGX  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 07 02 | 7,8  | 6,35  | 2,38 | 2,8 |
| 11 T3 | 11,6 | 9,525 | 3,97 | 4,4 |

| DC** Inserti positivi |  |  |  | HC <sup>1</sup> (CVD) |   |   |   |   |   |   |   |   |   | HC <sup>1</sup> (PVD) |   | HT | HC <sup>2</sup> | HW |
|-----------------------|--|--|--|-----------------------|---|---|---|---|---|---|---|---|---|-----------------------|---|----|-----------------|----|
|                       |  |  |  | P                     | ● | ● | ● | ● | ● | ● | ● | ● | ● | ●                     | ● | ●  | ●               |    |
|                       |  |  |  | M                     |   |   |   |   |   |   |   |   |   | ●                     | ● | ●  | ●               |    |
|                       |  |  |  | K                     |   |   |   |   |   |   |   |   |   |                       |   |    |                 |    |
|                       |  |  |  | N                     |   |   |   |   |   |   |   |   |   | ●                     | ● |    | ●               | ●  |
|                       |  |  |  | S                     |   |   |   |   |   |   |   |   |   | ●                     | ● |    | ●               | ●  |
|                       |  |  |  | H                     |   |   |   |   |   |   |   |   |   |                       |   |    |                 |    |

B

Fresatura

| ISO                                                                                                                                   |               | r   | a <sub>p</sub> | f         | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152 | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
|---------------------------------------------------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
| <div>LH</div> <div></div> <div>Lavorazione Al.</div> | DCGX070202-LH | 0,2 | 0,3-4,0        | 0,05-0,15 |        |        |        |        |        |        |        |        |        |        |        |         | ●      |        |        |        |        |        |        |        |        | ●       |       |       |
|                                                                                                                                       | DCGX070204-LH | 0,4 | 0,5-4,0        | 0,1-0,3   |        |        |        |        |        |        |        |        |        |        |        |         |        | ●      |        |        |        |        |        |        |        | ●       |       |       |
|                                                                                                                                       | DCGX070208-LH | 0,8 | 0,5-4,0        | 0,15-0,60 |        |        |        |        |        |        |        |        |        |        |        |         |        | ○      |        |        |        |        |        |        |        | ●       |       |       |
|                                                                                                                                       | DCGX11T302-LH | 0,2 | 0,3-5,5        | 0,05-0,15 |        |        |        |        |        |        |        |        |        |        |        |         |        | ●      |        |        |        |        |        |        |        | ●       |       |       |
|                                                                                                                                       | DCGX11T304-LH | 0,4 | 0,5-5,5        | 0,1-0,3   |        |        |        |        |        |        |        |        |        |        |        |         |        | ●      |        |        |        |        |        |        |        | ●       |       |       |
|                                                                                                                                       | DCGX11T308-LH | 0,8 | 0,5-5,5        | 0,15-0,60 |        |        |        |        |        |        |        |        |        |        |        |         |        | ●      |        |        |        |        |        |        |        | ●       |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

C

Foratura

| Portautensile |         |            |            |             |            |            |
|---------------|---------|------------|------------|-------------|------------|------------|
| SDACR/L       | SDJCR/L | SDNCN      | SDACR/L-SC | SDHCR/L-SC  | SDJCR/L-SC | SDNCN-SC   |
| Kr: 90°       | Kr: 93° | Kr: 62°30' | Kr: 90°    | Kr: 107°30' | Kr: 93°    | Kr: 62°30' |
|               |         |            |            |             |            |            |
| A271          | A272    | A273       | A308       | A309        | A310       | A311       |

D

Informazioni tecniche

| S***-SDQCR/L | A***-SDUCR/L | S***-SDZCR/L | E***-SDQCR/L |
|--------------|--------------|--------------|--------------|
| Kr: 107°30'  | Kr: 93°      | Kr: 85°      | Kr: 107°30'  |
|              |              |              |              |
| A336         | A337         | A338         | A357         |

E

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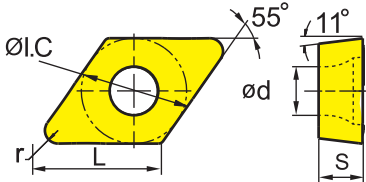
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Dati di taglio > A366

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DPGT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 07 02 | 7,8  | 6,35  | 2,38 | 2,8 |
| 11 T3 | 11,6 | 9,525 | 3,97 | 4,4 |

| DP** Inserti positivi                                                             |               |     |                |           | HC' (CVD) |        |        |        |        |        |        |        |        |        | HC' (PVD) |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|---------------|-----|----------------|-----------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |               |     |                |           | P         | ●      | ●      | ●      | ●      | ●      |        |        |        |        | ●         | ●       |        | ●      | ●      | ●               |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |                |           | M         |        |        |        |        |        | ●      | ●      |        |        | ●         | ●       | ●      | ●      | ●      | ●               | ●      | ●      |        |        |        |         |       |       |
|                                                                                   |               |     |                |           | K         |        |        |        |        |        |        |        | ●      | ●      | ●         | ●       |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |                |           | N         |        |        |        |        |        |        |        |        |        |           |         | ●      | ●      |        |                 |        |        |        | ●      | ●      |         |       |       |
|                                                                                   |               |     |                |           | S         |        |        |        |        |        |        |        |        |        |           |         |        | ●      | ●      | ●               | ●      | ●      |        |        | ●      | ●       |       |       |
|                                                                                   |               |     |                |           | H         |        |        |        |        |        |        |        |        |        |           |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| ISO                                                                               |               | r   | a <sub>p</sub> | f         | YBC103    | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152    | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| SF                                                                                | DPGT070202-SF | 0,2 | 0,05-2,00      | 0,05-0,15 |           |        |        |        |        |        |        |        |        |        |           |         |        |        |        |                 |        |        |        | ○      | ●      |         |       |       |
|                                                                                   | DPGT070204-SF | 0,4 | 0,05-2,00      | 0,05-0,30 |           |        |        |        |        |        |        |        |        |        |           |         |        |        |        |                 |        |        |        | ●      | ●      |         |       |       |
|                                                                                   | DPGT11T304-SF | 0,4 | 0,05-2,00      | 0,1-0,3   |           |        |        |        |        |        |        |        |        |        |           |         |        |        |        |                 |        |        |        | ●      | ●      |         |       |       |
|                                                                                   | DPGT11T308-SF | 0,8 | 0,05-2,00      | 0,1-0,4   |           |        |        |        |        |        |        |        |        |        |           |         |        |        |        |                 |        |        |        | ○      | ○      |         |       |       |
| Finitura                                                                          |               |     |                |           |           |        |        |        |        |        |        |        |        |        |           |         |        |        |        |                 |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile |              |              |
|---------------|--------------|--------------|
| S***-SDQPR/L  | S***-SDUPR/L | C***-SDQPR/L |
| Kr: 107°30'   | Kr: 93°      | Kr: 107°30'  |
|               |              |              |
| A349          | A350         | A356         |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

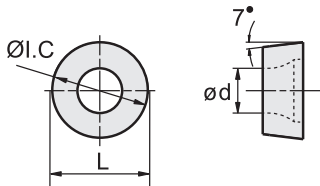
E

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| RC**  | L  | I.C | S    | d    |
|-------|----|-----|------|------|
| 08 03 | 8  | 8   | 3,18 | 3,36 |
| 10 T3 | 10 | 10  | 3,97 | 3,6  |
| 12 04 | 12 | 12  | 4,76 | 4,4  |
| 16 06 | 16 | 16  | 6,35 | 5,5  |
| 20 06 | 20 | 20  | 6,35 | 6,5  |
| 25 07 | 25 | 25  | 7,94 | 7,7  |

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura

| RC** Inserti positivi                                                                             |               |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |         |       |       |  |
|---------------------------------------------------------------------------------------------------|---------------|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|--------|-----------------|--------|--------|--------|--------|---------|-------|-------|--|
|                  |               |                | P                     |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
|                                                                                                   |               |                | M                     |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
|                                                                                                   |               |                | K                     |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
|                                                                                                   |               |                | N                     |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
|                                                                                                   |               |                | S                     |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
|                                                                                                   |               |                | H                     |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
| ISO                                                                                               |               | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152 | YBD152C               | YBG101 | YBG102 | YBG105 | YBG205 | YB9320          | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |  |
| <br>Basic        | RCMT0803MO    | 0,5-3,0        | 0,1-0,4               |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
|                                                                                                   | RCMT10T3MO    | 0,5-4,0        | 0,1-0,5               |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
|                                                                                                   | RCMT1204MO    | 0,8-5,0        | 0,1-0,6               |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
| <br>Media Lavor. | RCMT1606MO    | 1-6            | 0,1-0,8               |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
|                                                                                                   | RCMT2006MO    | 1,2-8,0        | 0,1-1,0               |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
|                                                                                                   | RCMT2507MO    | 1,4-10,0       | 0,1-1,2               |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
| <br>LH         | RCGX0803MO-LH | 1-4            | 0,2-0,5               |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
|                                                                                                   | RCGX1204MO-LH | 1,2-5,0        | 0,2-0,6               |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |
| Lavorazione Al                                                                                    |               |                |                       |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |                 |        |        |        |        |         |       |       |  |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

| Portautensile |         |
|---------------|---------|
| SRDCN         | SRGCR/L |
|               |         |
| A288          | A289    |

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Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366



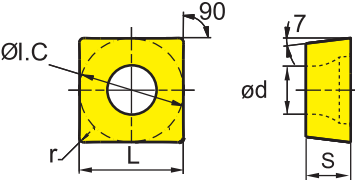




## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SCMT  | L     | I.C   | S    | d    |
|-------|-------|-------|------|------|
| 09 T3 | 9,525 | 9,525 | 3,97 | 4,4  |
| 12 04 | 12,7  | 12,7  | 4,76 | 5,56 |

| SC** Inserti positivi                                                                                     |               |     |           |           | HC <sup>1</sup> (CVD) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | HC <sup>1</sup> (PVD)                                                             |                                                                                     |                                                                                     |                                                                                     | HT                                                                                  | HC <sup>2</sup>                                                                     | HW                                                                                  |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------------------------------|---------------|-----|-----------|-----------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|---------|-------|-------|
|                          |               |     |           |           | P                     |  |  |  |  |  |                                                                                   |                                                                                   |                                                                                   |                                                                                     |  |  |  |  |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           |               |     |           |           | M                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |                                                                                   |                                                                                   |  |  |  |  |  |  |  |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           |               |     |           |           | K                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |    |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           |               |     |           |           | N                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |  |  |        |        |        |        |        |         |       |       |
|                                                                                                           |               |     |           |           | S                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |  |  |  |  |  |        |  |  |        |        |        |        |        |         |       |       |
|                                                                                                           |               |     |           |           | H                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
| ISO                                                                                                       |               |     |           |           | r                     | a <sub>p</sub>                                                                    | f                                                                                 | YBC103                                                                            | YB6315                                                                            | YBC152                                                                            | YBC203                                                                            | YBC252                                                                            | YBC352                                                                            | YBM153                                                                              | YBM253                                                                              | YBD102                                                                              | YB7315                                                                              | YBD152                                                                              | YBD152C                                                                             | YBG101                                                                              | YBG102 | YBG105                                                                              | YBG205                                                                              | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>HF<br>Finitura       | SCMT09T302-HF | 0,2 | 0,15-2,00 | 0,05-0,15 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           | SCMT09T304-HF | 0,4 | 0,11-2,00 | 0,05-0,23 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           | SCMT09T308-HF | 0,8 | 0,15-2,00 | 0,05-0,30 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           |               |     |           |           |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
| <br>HM<br>Media Lavor.   | SCMT09T304-HM | 0,4 | 0,25-3,00 | 0,08-0,23 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           | SCMT09T308-HM | 0,8 | 0,5-3,0   | 0,1-0,3   |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           | SCMT120404-HM | 0,4 | 0,3-3,6   | 0,09-0,27 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           | SCMT120408-HM | 0,8 | 0,6-3,6   | 0,12-0,36 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           | SCMT120412-HM | 1,2 | 0,72-3,60 | 0,14-0,43 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
| <br>XM<br>Media Lavor. | SCMT09T304-XM | 0,4 | 1-2,5     | 0,15-0,3  | ○                     |                                                                                   | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           | SCMT09T308-XM | 0,8 | 1-2,5     | 0,15-0,35 | ○                     |                                                                                   | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           | SCMT09T312-XM | 1,2 | 1-2,5     | 0,15-0,4  | ○                     |                                                                                   | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           | SCMT120408-XM | 0,8 | 1-3,0     | 0,15-0,35 | ○                     |                                                                                   | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |
|                                                                                                           | SCMT120412-XM | 1,2 | 1-3,0     | 0,15-0,4  | ○                     |                                                                                   | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |        |        |        |        |        |         |       |       |

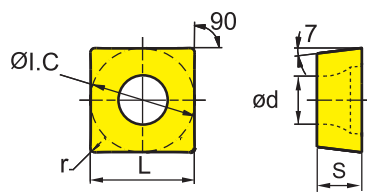
A

Tornitura

## Inseriti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SC**  | L     | I.C   | S    | d       |
|-------|-------|-------|------|---------|
| 09 T3 | 9,525 | 9,525 | 3,97 | 4,4     |
| 12 04 | 12,7  | 12,7  | 4,76 | 5,55,56 |

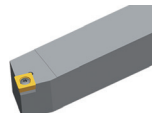
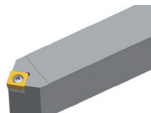
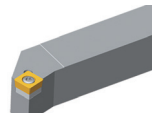
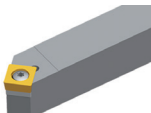
| SC** Insetti positivi                                                                                      |               |     |           | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|------------------------------------------------------------------------------------------------------------|---------------|-----|-----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                           |               |     |           | P                     | ●              | ● | ●      | ●      | ●      | ●      |        |        |        |                       | ●      | ●      |        | ●       | ●      |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                            |               |     |           | M                     |                |   |        |        |        | ●      | ●      |        |        |                       | ●      | ●      | ●      | ●       | ●      | ●               | ●      | ●      |        |        |        |        |        |         |       |       |
|                                                                                                            |               |     |           | K                     |                |   |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                            |               |     |           | N                     |                |   |        |        |        |        |        |        |        |                       | ●      | ●      |        |         |        |                 |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                                            |               |     |           | S                     |                |   |        |        |        |        |        |        |        |                       |        | ●      | ●      | ●       | ●      | ●               |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                                            |               |     |           | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                        |               |     |           | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>HR<br>Sgrossatura     | SCMT09T304-HR | 0,4 | 0,2-4,0   | 0,05-0,40             |                |   | ○      |        | ●      |        |        |        |        |                       |        |        |        | ○       |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                            | SCMT09T308-HR | 0,8 | 1-4       | 0,12-0,35             |                |   | ●      |        | ●      |        |        |        |        |                       | ●      |        | ●      |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                            | SCMT09T312-HR | 1,2 | 1,2-4,0   | 0,14-0,42             |                |   |        |        |        | ○      |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                            | SCMT120404-HR | 0,4 | 0,5-4,0   | 0,05-0,50             |                |   | ○      |        | ○      |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                            | SCMT120408-HR | 0,8 | 1,2-4,8   | 0,14-0,42             |                |   | ●      |        | ●      |        |        |        |        |                       | ●      |        | ●      |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                            | SCMT120412-HR | 1,2 | 1,44-4,80 | 0,17-0,50             |                |   | ●      |        | ●      |        |        |        |        |                       | ●      |        | ○      |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| <br>LC<br>Lavorazione AL | SCGX09T304-LC | 0,4 | 0,5-5,0   | 0,1-0,5               |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         | ●     |       |
|                                                                                                            | SCGX09T308-LC | 0,8 | 0,5-5,0   | 0,15-0,60             |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |        |                 |        |        |        |        |        |        |        |         | ●     |       |
|                                                                                                            | SCGX120408-LC | 0,8 | 1-7       | 0,15-0,60             |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |        | ●               |        |        |        |        |        |        |        |         | ●     |       |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

D

Informazioni tecniche

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| SSBCR/L                                                                             | SSDCN                                                                               | SSKCR/L                                                                             | SSSCR/L                                                                             | S***-SSKCR/L                                                                         |
| Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                             | Kr: 75°                                                                              |
|  |  |  |  |  |
| A279                                                                                | A280                                                                                | A281                                                                                | A282                                                                                | A339                                                                                 |

E

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Dati di taglio > A366

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SCGX  | L     | I.C   | S    | d    |
|-------|-------|-------|------|------|
| 09 T3 | 9,525 | 9,525 | 3,97 | 4,4  |
| 12 04 | 12,7  | 12,7  | 4,76 | 5,56 |

| SC** Inserti positivi                                |               |     |         |           |                |   |        |        |        |        |        |        |        |        |        |        |        |         |        | HC' (CVD) |        |        |        | HC' (PVD) |        |        |        | HT      |       | HC <sup>2</sup> |   | HW |  |
|------------------------------------------------------|---------------|-----|---------|-----------|----------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|-----------|--------|--------|--------|-----------|--------|--------|--------|---------|-------|-----------------|---|----|--|
|                                                      |               |     |         | P         | ●              | ● | ●      | ●      | ●      | ●      |        |        |        |        |        |        |        |         | ●      | ●         |        |        | ●      | ●         | ●      |        |        |         |       |                 |   |    |  |
|                                                      |               |     |         | M         |                |   |        |        |        |        |        | ●      | ●      |        |        |        |        |         |        |           | ●      | ●      | ●      | ●         | ●      | ●      | ●      |         |       |                 |   |    |  |
|                                                      |               |     |         | K         |                |   |        |        |        |        |        |        |        |        |        | ●      | ●      | ●       | ●      |           |        |        |        |           |        |        |        |         |       |                 |   |    |  |
|                                                      |               |     |         | N         |                |   |        |        |        |        |        |        |        |        |        |        |        |         |        |           | ●      | ●      |        |           |        |        |        |         |       |                 | ● | ●  |  |
|                                                      |               |     |         | S         |                |   |        |        |        |        |        |        |        |        |        |        |        |         |        |           |        |        |        | ●         | ●      | ●      | ●      | ●       |       |                 | ● | ●  |  |
|                                                      |               |     |         | H         |                |   |        |        |        |        |        |        |        |        |        |        |        |         |        |           |        |        |        |           |        |        |        |         |       |                 |   |    |  |
| ISO                                                  |               |     |         | r         | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152 | YBD152C | YBG101 | YBG102    | YBG105 | YBG205 | YB9320 | YPD201    | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201           |   |    |  |
| <div>LH</div> <div></div> <div>Lavorazione Al.</div> | SCGX09T302-LH | 0,2 | 0,5-4,0 | 0,05-0,15 |                |   |        |        |        |        |        |        |        |        |        |        |        |         |        | ○         |        |        |        |           |        |        |        |         | ●     |                 |   |    |  |
|                                                      | SCGX09T304-LH | 0,4 | 0,5-4,0 | 0,1-0,3   |                |   |        |        |        |        |        |        |        |        |        |        |        |         |        |           |        |        |        |           |        |        |        |         |       | ●               |   |    |  |
|                                                      | SCGX09T308-LH | 0,8 | 0,5-4,0 | 0,15-0,60 |                |   |        |        |        |        |        |        |        |        |        |        |        |         |        |           |        |        |        |           |        |        |        |         |       | ●               |   |    |  |
|                                                      | SCGX120408-LH | 0,8 | 0,5-5,0 | 0,15-0,60 |                |   |        |        |        |        |        |        |        |        |        |        |        |         |        |           |        | ○      |        |           |        |        |        |         |       | ●               |   |    |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile |         |         |         |              |
|---------------|---------|---------|---------|--------------|
| SSBCR/L       | SSDCN   | SSKCR/L | SSSCR/L | S***-SSKCR/L |
| Kr: 75°       | Kr: 45° | Kr: 75° | Kr: 45° | Kr: 75°      |
|               |         |         |         |              |
| A279          | A280    | A281    | A282    | A339         |

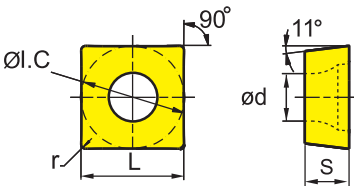
A

Tornitura

## Inseriti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SPMW  | L     | I.C   | S    | d    |
|-------|-------|-------|------|------|
| 09 T3 | 9,525 | 9,525 | 3,97 | 4,4  |
| 12 04 | 12,7  | 12,7  | 4,76 | 5,56 |

| SP** Inserti positivi                                                                             |            |     |         | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |        |         |       |       |
|---------------------------------------------------------------------------------------------------|------------|-----|---------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                  |            |     |         | P                     | ●              | ● | ●      | ●      | ●      |        |        |        |        | ●                     | ●      |        | ●      | ●               | ●      |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                   |            |     |         | M                     |                |   |        |        |        | ●      | ●      |        |        |                       | ●      | ●      | ●      | ●               | ●      | ●      | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                                   |            |     |         | K                     |                |   |        |        |        |        |        |        | ●      | ●                     | ●      | ●      |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                   |            |     |         | N                     |                |   |        |        |        |        |        |        |        |                       | ●      | ●      |        |                 |        |        |        | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                                   |            |     |         | S                     |                |   |        |        |        |        |        |        |        |                       |        | ●      | ●      | ●               | ●      | ●      |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                                   |            |     |         | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                               |            |     |         | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C         | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>Flat</div>  | SPMW09T304 | 0,4 | 0,5-4,0 | 0,1-0,4               |                |   |        |        |        |        |        |        |        |                       |        |        |        | ○               |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                   | SPMW09T308 | 0,8 | 0,5-4,0 | 0,2-0,4               |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 | ○      |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                   | SPMW120408 | 0,8 | 1-6     | 0,3-0,6               |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 | ○      |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                   |            |     |         |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

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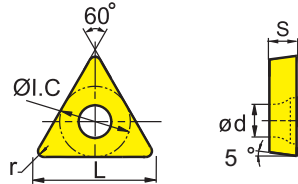
Informazioni tecniche > A501

Dati di taglio > A366

**Inserti - Tornitura**

- Buone condizioni di lavorazione  
 ● Condizioni di lavorazione normali  
 ● Condizioni di lavorazione sfavorevoli

| TBGH  | L    | I.C  | S    | d   |
|-------|------|------|------|-----|
| 06 01 | 6,87 | 3,97 | 1,59 | 2,2 |

| TB** Inserti positivi                                                             |             |     |                |           |        |        |        |        |        |        |        |        |        |        |        | HC' (CVD) |        |        |        |        |        | HC' (PVD) |        |        |        | HT      |       | HC <sup>2</sup> |   | HW |   |
|-----------------------------------------------------------------------------------|-------------|-----|----------------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|--------|--------|--------|--------|-----------|--------|--------|--------|---------|-------|-----------------|---|----|---|
|  |             |     |                | P         | ●      | ●      | ●      | ●      | ●      |        |        |        |        |        |        |           |        |        | ●      | ●      |        | ●         | ●      | ●      |        |         |       |                 |   |    |   |
|                                                                                   |             |     |                | M         |        |        |        |        |        |        | ●      | ●      |        |        |        |           |        |        |        | ●      | ●      | ●         | ●      | ●      | ●      | ●       | ●     |                 |   |    |   |
|                                                                                   |             |     |                | K         |        |        |        |        |        |        |        |        |        | ●      | ●      | ●         | ●      |        |        |        |        |           |        |        |        |         |       |                 |   |    |   |
|                                                                                   |             |     |                | N         |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        | ●      | ●      |           |        |        |        |         |       |                 | ● | ●  |   |
|                                                                                   |             |     |                | S         |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |        | ●         | ●      | ●      | ●      | ●       | ●     |                 |   | ●  | ● |
|                                                                                   |             |     |                | H         |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |        |           |        |        |        |         |       |                 |   |    |   |
| ISO                                                                               |             | r   | a <sub>p</sub> | f         | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152 | YBD152C   | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201    | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201           |   |    |   |
|  | TBGH060102L | 0,2 | 0,5-3,5        | 0,05-0,40 |        |        |        |        |        |        |        |        |        |        |        |           |        | ●      |        |        |        |           |        | ●      |        |         |       |                 |   |    |   |
|                                                                                   | TBGH060104L | 0,4 | 0,5-3,5        | 0,05-0,40 |        |        |        |        |        |        |        |        |        |        |        |           |        |        | ○      |        |        |           |        |        | ●      |         |       |                 |   |    |   |
|                                                                                   |             |     |                |           |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |        |           |        |        |        |         |       |                 |   |    |   |
|                                                                                   |             |     |                |           |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |        |           |        |        |        |         |       |                 |   |    |   |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

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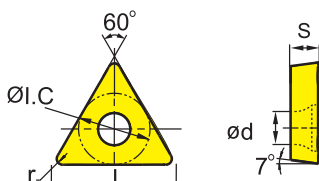
E

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## Inserti - Tornitura

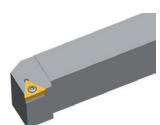
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TCGT  | L    | I.C  | S    | d   |
|-------|------|------|------|-----|
| 06 T1 | 6,87 | 3,97 | 1,98 | 2,2 |
| 09 02 | 9,63 | 5,56 | 2,38 | 2,5 |
| 11 03 | 11   | 6,35 | 3,18 | 2,8 |

| TC** Inserti positivi                                                                               |               |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------------------------|---------------|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                    |               |                |           | P                     | ●      | ●      | ●      | ●      | ●      |        |        |        | ●      | ●                     | ●       | ●      |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     |               |                |           | M                     |        |        |        |        | ●      | ●      |        |        |        | ●                     | ●       | ●      | ●               | ●      | ●      |        |        |        |        |        |         |       |       |
|                                                                                                     |               |                |           | K                     |        |        |        |        |        |        |        | ●      | ●      | ●                     |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     |               |                |           | N                     |        |        |        |        |        |        |        |        |        | ●                     | ●       |        |                 |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                                     |               |                |           | S                     |        |        |        |        |        |        |        |        |        |                       | ●       | ●      | ●               | ●      | ●      |        | ●      | ●      |        |        |         |       |       |
|                                                                                                     |               |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                 | r             | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>SF<br>Finitura | TCGT06T102-SF | 0,2            | 0,05-2,00 | 0,05-0,15             |        |        |        |        |        |        |        |        |        |                       |         |        |                 |        |        |        |        |        |        | ●      |         |       |       |
|                                                                                                     | TCGT090202-SF | 0,2            | 0,05-2,00 | 0,05-0,15             |        |        |        |        |        |        |        |        |        |                       |         |        |                 |        |        |        |        |        | ○      | ○      |         |       |       |
|                                                                                                     | TCGT090204-SF | 0,4            | 0,05-2,00 | 0,1-0,3               |        |        |        |        |        |        |        |        |        |                       |         |        |                 |        |        |        |        |        |        | ●      |         |       |       |
|                                                                                                     | TCGT090208-SF | 0,8            | 0,05-2,00 | 0,10-0,35             |        |        |        |        |        |        |        |        |        |                       |         |        |                 |        |        |        |        |        |        | ●      |         |       |       |
|                                                                                                     | TCGT110302-SF | 0,2            | 0,05-2,00 | 0,05-0,15             |        |        |        |        |        |        |        |        |        |                       |         |        |                 |        |        |        |        |        |        | ○      |         |       |       |
|                                                                                                     | TCGT110304-SF | 0,4            | 0,05-2,00 | 0,1-0,3               |        |        |        |        |        |        |        |        |        |                       |         |        |                 |        |        |        |        |        | ●      | ●      |         |       |       |
|                                                                                                     | TCGT110308-SF | 0,8            | 0,05-2,00 | 0,10-0,35             |        |        |        |        |        |        |        |        |        |                       |         |        |                 |        |        |        |        |        |        | ○      |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| STGCR/L                                                                             | E***-STFCR/L                                                                        |
| Kr: 91°                                                                             | Kr: 90°                                                                             |
|  |  |
| A285                                                                                | A361                                                                                |

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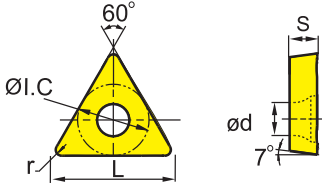
Dati di taglio > A366



## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TCMT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 09 02 | 9,63 | 5,56  | 2,38 | 2,5 |
| 11 02 | 11   | 6,35  | 2,38 | 2,8 |
| 16 T3 | 16,5 | 9,525 | 3,97 | 4,4 |

| TC** Inserti positivi                                                                           |                |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        |        | HT     | HC <sup>2</sup> | HW     |        |        |         |       |       |   |  |
|-------------------------------------------------------------------------------------------------|----------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|--------|--------|-----------------|--------|--------|--------|---------|-------|-------|---|--|
|                |                |     |                | P                     | ●      | ●      | ●      | ●      | ●      |        |        |        |        |        |        |                       |        | ●      | ●      |        | ●      |                 |        |        |        |         |       |       |   |  |
|                                                                                                 |                |     |                | M                     |        |        |        |        |        | ●      | ●      |        |        |        |        |                       | ●      | ●      | ●      | ●      | ●      | ●               | ●      | ●      | ●      |         |       |       |   |  |
|                                                                                                 |                |     |                | K                     |        |        |        |        |        |        |        | ●      | ●      | ●      | ●      |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
|                                                                                                 |                |     |                | N                     |        |        |        |        |        |        |        |        |        |        |        | ●                     | ●      |        |        |        |        |                 |        |        |        |         | ●     | ●     |   |  |
|                                                                                                 |                |     |                | S                     |        |        |        |        |        |        |        |        |        |        |        |                       |        | ●      | ●      | ●      | ●      | ●               | ●      |        |        |         |       | ●     | ● |  |
|                                                                                                 |                |     |                | H                     |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
| ISO                                                                                             |                | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152 | YBD152C               | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201          | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |   |  |
| <br>Finitura   | TCMT110204-AHF | 0,4 | 0,2-2,5        | 0,05-0,30             | ●      |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        | ●      |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT110208-AHF | 0,8 | 0,2-2,5        | 0,1-0,4               | ●      |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        | ●      |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT16T304-AHF | 0,4 | 0,5-3,0        | 0,05-0,30             | ●      |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        | ●      |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT16T308-AHF | 0,8 | 0,5-3,5        | 0,1-0,4               | ●      |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        | ●      |                 |        |        |        |         |       |       |   |  |
| <br>Finitura | TCMT090202-HF  | 0,2 | 0,06-1,70      | 0,03-0,13             |        | ○      |        | ●      |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        | ○      |        |         |       |       |   |  |
|                                                                                                 | TCMT090204-HF  | 0,4 | 0,1-1,7        | 0,05-0,19             |        | ○      |        | ●      |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT090208-HF  | 0,8 | 0,15-1,70      | 0,10-0,25             |        |        |        |        | ○      |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT110202-HF  | 0,2 | 0,08-2,00      | 0,05-0,20             |        |        |        |        | ●      |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT110204-HF  | 0,4 | 0,1-2,0        | 0,05-0,30             |        | ○      |        | ●      |        |        |        |        |        | ○      |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT110208-HF  | 0,8 | 0,1-2,0        | 0,05-0,35             |        | ●      |        | ●      |        |        |        |        | ●      |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT16T304-HF  | 0,4 | 0,11-2,00      | 0,05-0,23             |        | ○      |        | ●      |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT16T308-HF  | 0,8 | 0,2-3,5        | 0,05-0,30             |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
| <br>Finitura | TCMT090202-XF  | 0,2 | 0,5-1,5        | 0,08-0,15             |        |        |        | ○      |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT090204-XF  | 0,4 | 0,5-1,5        | 0,08-0,20             | ●      |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT110202-XF  | 0,2 | 0,5-2,0        | 0,08-0,15             |        |        |        | ○      |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT110204-XF  | 0,4 | 0,5-2,0        | 0,08-0,20             | ●      |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT110208-XF  | 0,8 | 0,5-2,5        | 0,08-0,25             | ●      |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT16T304-XF  | 0,4 | 0,5-2,5        | 0,08-0,20             | ●      |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |
|                                                                                                 | TCMT16T308-XF  | 0,8 | 0,5-2,5        | 0,08-0,25             | ●      |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |   |  |

● In magazzino ○ Su richiesta  
 disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile |         |         |         |              |              |
|---------------|---------|---------|---------|--------------|--------------|
| STACR/L       | STFCR/L | STGCR/L | STTCR/L | S***-STFCR/L | E***-STFCR/L |
| Kr: 90°       | Kr: 91° | Kr: 91° | Kr: 60° | Kr: 91°      | Kr: 90°      |
|               |         |         |         |              |              |
| A283          | A284    | A285    | A286    | A341         | A361         |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

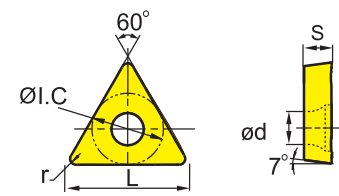
E

Indice

## Inseriti - Tornitura

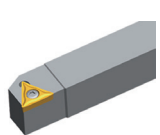
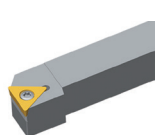
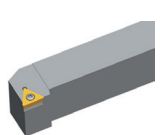
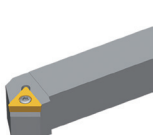
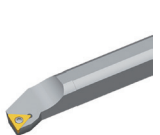
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TCMT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 09 02 | 9,63 | 5,56  | 2,38 | 2,5 |
| 11 02 | 11   | 6,35  | 2,38 | 2,8 |
| 16 T3 | 16,5 | 9,525 | 3,97 | 4,4 |

| TC** Insetti positivi                                                                     |               |     |                |           | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |         |       |       |
|-------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|---------|-------|-------|
|          |               |     |                |           | P                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |                |           | M                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |                |           | K                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |                |           | N                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |                |           | S                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                           |               |     |                |           | H                     |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| ISO                                                                                       |               | r   | a <sub>p</sub> | f         | YBC103                | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205          | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>EF   | TCMT090202-EF | 0,2 | 0,06-1,70      | 0,03-0,13 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                           | TCMT090204-EF | 0,4 | 0,1-1,7        | 0,05-0,19 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        | ●               |        |        |        |        |        |         |       |       |
|                                                                                           | TCMT110202-EF | 0,2 | 0,2-2,0        | 0,05-0,13 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        | ○               |        |        |        |        |        |         |       |       |
|                                                                                           | TCMT110204-EF | 0,4 | 0,2-2,0        | 0,05-0,20 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        | ●               |        |        |        |        |        |         |       |       |
|                                                                                           | TCMT16T304-EF | 0,4 | 0,3-3,0        | 0,05-0,23 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        | ●               |        |        |        |        |        |         |       |       |
|                                                                                           | TCMT16T308-EF | 0,8 | 0,3-3,0        | 0,1-0,4   |                       |        |        |        |        |        |        | ●      |        |        |                       |         |        |        |        | ●               |        |        |        |        |        |         |       |       |
| <br>EM  | TCMT090204-EM | 0,4 | 0,19-2,25      | 0,06-0,17 |                       |        |        |        |        |        | ○      |        |        |        |                       |         |        |        | ●      |                 |        |        |        |        |        |         |       |       |
|                                                                                           | TCMT110204-EM | 0,4 | 0,2-2,7        | 0,05-0,30 |                       |        |        |        |        |        | ○      |        |        |        |                       |         |        |        | ●      |                 |        |        |        |        |        |         |       |       |
|                                                                                           | TCMT110208-EM | 0,8 | 0,8-2,7        | 0,08-0,30 |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        | ●      |                 |        |        |        |        |        |         |       |       |
|                                                                                           | TCMT16T304-EM | 0,4 | 0,25-3,00      | 0,08-0,23 |                       |        |        |        |        |        | ●      |        |        |        |                       |         |        |        | ●      |                 |        |        |        |        |        |         |       |       |
|                                                                                           | TCMT16T308-EM | 0,8 | 0,5-3,0        | 0,1-0,3   |                       |        |        |        |        |        | ●      | ●      |        |        |                       |         |        |        | ●      |                 |        |        |        |        |        |         |       |       |
| <br>XM | TCMT16T304-XM | 0,4 | 1-3,0          | 0,15-0,3  | ○                     |        | ○      |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                           | TCMT16T308-XM | 0,8 | 1-3,0          | 0,15-0,35 | ○                     |        | ○      |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
|                                                                                           | TCMT16T312-XM | 1,2 | 1-3,0          | 0,15-0,4  | ○                     |        | ○      |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |
| Media Lavor.                                                                              |               |     |                |           |                       |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |                 |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| STACR/L                                                                             | STFCR/L                                                                             | STGCR/L                                                                             | STTCR/L                                                                             | S***-STFCR/L                                                                         | E***-STFCR/L                                                                          |
| Kr: 90°                                                                             | Kr: 91°                                                                             | Kr: 91°                                                                             | Kr: 60°                                                                             | Kr: 91°                                                                              | Kr: 90°                                                                               |
|  |  |  |  |  |  |
| A283                                                                                | A284                                                                                | A285                                                                                | A286                                                                                | A341                                                                                 | A361                                                                                  |

Codice sistema > A48

Scelta gradi > A42

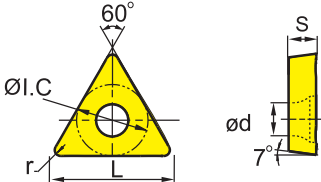
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TC**  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 09 02 | 9,63 | 5,56  | 2,38 | 2,5 |
| 11 02 | 11   | 6,35  | 2,38 | 2,8 |
| 16 T3 | 16,5 | 9,525 | 3,97 | 4,4 |
| 22 04 | 22   | 12,7  | 4,76 | 5,5 |

| TC** Inserti positivi                                                                     |               |     |                |           | HC' (CVD) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | HC' (PVD)                                                                          |                                                                                     |                                                                                     |                                                                                     |                                                                                     | HT                                                                                  | HC <sup>2</sup>                                                                     | HW                                                                                  |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|-------------------------------------------------------------------------------------------|---------------|-----|----------------|-----------|-----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|          |               |     |                |           | P         |  |  |  |  |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |  |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           |               |     |                |           | M         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |                                                                                   |                                                                                   |                                                                                    |                                                                                     |  |  |  |  |  |  |  |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           |               |     |                |           | K         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           |               |     |                |           | N         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |  |  |                                                                                     |  |
|                                                                                           |               |     |                |           | S         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |  |        |                                                                                     |  |  |  |
|                                                                                           |               |     |                |           | H         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
| ISO                                                                                       |               | r   | a <sub>p</sub> | f         | YBC103    | YB6315                                                                            | YBC152                                                                            | YBC203                                                                            | YBC252                                                                            | YBC352                                                                            | YBM153                                                                            | YBM253                                                                            | YBD102                                                                            | YB7315                                                                            | YBD152                                                                             | YBD152C                                                                             | YBG101                                                                              | YBG102                                                                              | YBG105                                                                              | YBG205                                                                              | YB9320                                                                              | YPD201                                                                              | YBS103                                                                              | YNG151                                                                              | YNT251 | YNG151C                                                                             | YD101                                                                               | YD201                                                                               |  |
| Flat<br> | TCMW16T308    | 0,8 | 0,5-5,0        | 0,05-0,60 |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | ○                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           |               |     |                |           |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           |               |     |                |           |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
| Media Lavor.                                                                              |               |     |                |           |           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
| HM<br> | TCMT090204-HM | 0,4 | 0,19-2,25      | 0,06-0,17 |           |                                                                                   | ●                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                   | ●                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           | TCMT090208-HM | 0,8 | 0,38-2,25      | 0,08-0,23 |           |                                                                                   | ○                                                                                 |                                                                                   | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ○                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           | TCMT110204-HM | 0,4 | 0,2-2,7        | 0,07-0,20 |           |                                                                                   | ●                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                   | ●                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           | TCMT110208-HM | 0,8 | 0,5-2,7        | 0,1-0,3   |           |                                                                                   | ●                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                   | ●                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           | TCMT16T304-HM | 0,4 | 0,25-3,00      | 0,08-0,23 |           |                                                                                   | ●                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                   | ●                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           | TCMT16T308-HM | 0,8 | 0,5-3,0        | 0,1-0,3   |           |                                                                                   | ●                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                   | ●                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           | TCMT16T312-HM | 1,2 | 0,6-3,0        | 0,12-0,36 |           |                                                                                   | ○                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
| HR<br> | TCMT090204-HR | 0,4 | 0,5-3,0        | 0,1-0,3   |           |                                                                                   |                                                                                   |                                                                                   | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           | TCMT090208-HR | 0,8 | 0,5-3,5        | 0,08-0,50 |           |                                                                                   |                                                                                   |                                                                                   | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | ○                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           | TCMT110204-HR | 0,4 | 0,5-3,0        | 0,1-0,4   |           |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           | TCMT110208-HR | 0,8 | 1-4            | 0,1-0,5   |           |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           | TCMT16T304-HR | 0,4 | 0,5-4,0        | 0,1-0,4   |           |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           | TCMT16T308-HR | 0,8 | 1-4            | 0,12-0,35 |           |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   | ●                                                                                 |                                                                                   | ●                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           | TCMT16T312-HR | 1,2 | 1,2-4,0        | 0,14-0,42 |           |                                                                                   | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ○                                                                                 |                                                                                   | ●                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                           | TCMT220408-HR | 0,8 | 1,2-4,8        | 0,14-0,42 |           |                                                                                   | ○                                                                                 |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ●                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |  |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |         |         |              |              |
|---------------|---------|---------|---------|--------------|--------------|
| STACR/L       | STFCR/L | STGCR/L | STTCR/L | S***-STFCR/L | E***-STFCR/L |
| Kr: 90°       | Kr: 91° | Kr: 91° | Kr: 60° | Kr: 91°      | Kr: 90°      |
|               |         |         |         |              |              |
| A283          | A284    | A285    | A286    | A341         | A361         |

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Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366



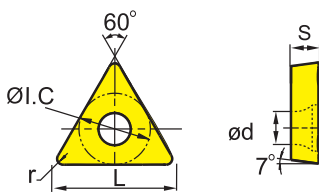
A

Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TCMT  | L  | I.C  | S    | d   |
|-------|----|------|------|-----|
| 22 04 | 22 | 12,7 | 4,76 | 5,5 |

| TC** Inserti positivi                                                             |            |     |         | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        | HT     | HC <sup>2</sup> | HW      |        |        |        |        |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|------------|-----|---------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|-----------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |            |     |         | P                     | ●              | ● | ●      | ●      | ●      | ●      |        |        |        | ●                     | ●      | ●      | ●               |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |     |         | M                     |                |   |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●      | ●               | ●       | ●      |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |     |         | K                     |                |   |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |     |         | N                     |                |   |        |        |        |        |        |        |        | ●                     | ●      |        |                 |         |        | ●      | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |     |         | S                     |                |   |        |        |        |        |        |        |        | ●                     | ●      | ●      | ●               | ●       |        | ●      | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |     |         | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                               |            |     |         | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152          | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
|  | TCMT220408 | 0,8 | 1,2-4,8 | 0,14-0,42             |                |   |        |        |        |        |        |        |        |                       | ●      |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |     |         |                       |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |     |         |                       |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |     |         |                       |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |            |     |         |                       |                |   |        |        |        |        |        |        |        |                       |        |        |                 |         |        |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

B

Fresatura

C

Foratura

D

Informazioni tecniche

E

Indice

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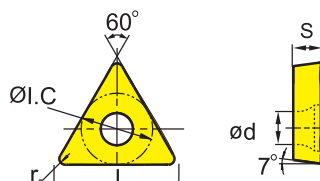
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

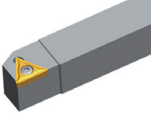
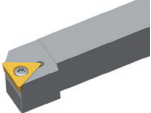
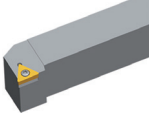
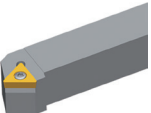
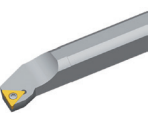
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TCGX  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 09 02 | 9,63 | 5,56  | 2,38 | 2,5 |
| 11 02 | 11   | 6,35  | 2,38 | 2,8 |
| 16 T3 | 16,5 | 9,525 | 3,97 | 4,4 |

| TC** Inserti positivi                                                                                  |                      |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        |        | HT     | HC <sup>2</sup> | HW     |        |        |         |       |       |
|--------------------------------------------------------------------------------------------------------|----------------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|--------|--------|-----------------|--------|--------|--------|---------|-------|-------|
|                       |                      |     |                | <b>P</b>              |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
|                                                                                                        |                      |     |                | <b>M</b>              |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
|                                                                                                        |                      |     |                | <b>K</b>              |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
|                                                                                                        |                      |     |                | <b>N</b>              |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
|                                                                                                        |                      |     |                | <b>S</b>              |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
|                                                                                                        |                      |     |                | <b>H</b>              |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         |       |       |
| ISO                                                                                                    |                      | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152 | YBD152C               | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201          | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Lavorazione Al.   | <b>TCGX090202-LC</b> | 0,2 | 0,3-4,0        | 0,05-0,15             |        |        |        |        |        |        |        |        |        |        |        |                       | ●      |        |        |        |        |                 |        |        |        |         | ●     |       |
|                                                                                                        | <b>TCGX090204-LC</b> | 0,4 | 0,5-4,0        | 0,1-0,3               |        |        |        |        |        |        |        |        |        |        |        |                       | ●      |        |        |        |        |                 |        |        |        |         | ●     |       |
|                                                                                                        | <b>TCGX110202-LC</b> | 0,2 | 0,3-5,0        | 0,05-0,15             |        |        |        |        |        |        |        |        |        |        |        |                       | ●      |        |        |        |        |                 |        |        |        |         | ●     |       |
|                                                                                                        | <b>TCGX110204-LC</b> | 0,4 | 0,5-5,0        | 0,1-0,3               |        |        |        |        |        |        |        |        |        |        |        |                       | ●      |        |        |        |        |                 |        |        |        |         | ●     |       |
|                                                                                                        | <b>TCGX110208-LC</b> | 0,8 | 0,5-5,0        | 0,15-0,60             |        |        |        |        |        |        |        |        |        |        |        |                       | ●      |        |        |        |        |                 |        |        |        |         | ●     |       |
|                                                                                                        | <b>TCGX16T304-LC</b> | 0,4 | 0,5-7,0        | 0,1-0,3               |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         | ●     |       |
|                                                                                                        | <b>TCGX16T308-LC</b> | 0,8 | 0,5-7,0        | 0,15-0,60             |        |        |        |        |        |        |        |        |        |        |        |                       | ●      |        |        |        |        |                 |        |        |        |         | ●     |       |
| <br>Lavorazione Al. | <b>TCGX090202-LH</b> | 0,2 | 0,3-4,0        | 0,05-0,15             |        |        |        |        |        |        |        |        |        |        |        |                       | ○      |        |        |        |        |                 |        |        |        |         | ●     |       |
|                                                                                                        | <b>TCGX090204-LH</b> | 0,4 | 0,5-4,0        | 0,1-0,3               |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         | ●     |       |
|                                                                                                        | <b>TCGX110202-LH</b> | 0,2 | 0,3-5,0        | 0,05-0,15             |        |        |        |        |        |        |        |        |        |        |        |                       |        | ○      |        |        |        |                 |        |        |        |         | ●     |       |
|                                                                                                        | <b>TCGX110204-LH</b> | 0,4 | 0,5-5,0        | 0,1-0,3               |        |        |        |        |        |        |        |        |        |        |        |                       |        | ●      |        |        |        |                 |        |        |        |         | ●     |       |
|                                                                                                        | <b>TCGX110208-LH</b> | 0,8 | 0,5-5,0        | 0,15-0,60             |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         | ●     |       |
|                                                                                                        | <b>TCGX16T302-LH</b> | 0,2 | 0,5-7,0        | 0,05-0,15             |        |        |        |        |        |        |        |        |        |        |        |                       |        |        |        |        |        |                 |        |        |        |         | ●     |       |
|                                                                                                        | <b>TCGX16T304-LH</b> | 0,4 | 0,5-7,0        | 0,1-0,3               |        |        |        |        |        |        |        |        |        |        |        |                       |        | ○      |        |        |        |                 |        |        |        |         | ●     |       |
|                                                                                                        | <b>TCGX16T308-LH</b> | 0,8 | 0,5-7,0        | 0,15-0,60             |        |        |        |        |        |        |        |        |        |        |        |                       |        | ○      |        |        |        |                 |        |        |        |         | ●     |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| STACR/L                                                                             | STFCR/L                                                                             | STGCR/L                                                                             | STTCR/L                                                                             | S***-STFCR/L                                                                         | E***-STFCR/L                                                                          |
| Kr: 90°                                                                             | Kr: 91°                                                                             | Kr: 91°                                                                             | Kr: 60°                                                                             | Kr: 91°                                                                              | Kr: 90°                                                                               |
|  |  |  |  |  |  |
| A283                                                                                | A284                                                                                | A285                                                                                | A286                                                                                | A341                                                                                 | A361                                                                                  |

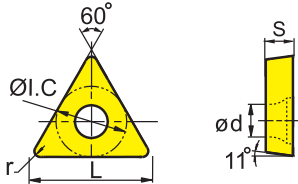
A

Tornitura

## Inseriti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TPGH  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 09 02 | 9,63 | 5,56 | 2,38 | 2,8  |
| 11 03 | 11   | 6,35 | 3,18 | 3,18 |

| TP** Inserti positivi                                                                         |                    |     |         | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |        |         |       |       |  |
|-----------------------------------------------------------------------------------------------|--------------------|-----|---------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|--|
|              |                    |     |         | <b>P</b>              | ●              | ● | ●      | ●      | ●      | ●      |        |        |        | ●                     | ●      |        | ●      | ●               | ●      |        |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                               |                    |     |         | <b>M</b>              |                |   |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●      | ●      | ●               | ●      | ●      |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                               |                    |     |         | <b>K</b>              |                |   |        |        |        |        |        |        | ●      | ●                     | ●      | ●      |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |  |
|                                                                                               |                    |     |         | <b>N</b>              |                |   |        |        |        |        |        |        |        | ●                     | ●      |        |        |                 |        |        | ●      | ●      |        |        |        |        |        |         |       |       |  |
|                                                                                               |                    |     |         | <b>S</b>              |                |   |        |        |        |        |        |        |        |                       | ●      | ●      | ●      | ●               | ●      |        |        | ●      | ●      |        |        |        |        |         |       |       |  |
|                                                                                               |                    |     |         | <b>H</b>              |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        |        |        |        |        |        |        |        |         |       |       |  |
| ISO                                                                                           |                    |     |         | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C         | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |  |
| <br>Finitura | <b>TPGH090202L</b> | 0,2 | 0,2-3,0 | 0,05-0,15             |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        | ●      |        |        |        |        |        |        | ●      | ●       |       |       |  |
|                                                                                               | <b>TPGH090204L</b> | 0,4 | 0,2-3,0 | 0,05-0,30             |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        | ●      |        |        |        |        |        |        | ●       | ●     |       |  |
|                                                                                               | <b>TPGH110302L</b> | 0,2 | 0,2-3,5 | 0,05-0,15             |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        | ●      |        |        |        |        |        |        | ●       | ●     |       |  |
|                                                                                               | <b>TPGH110304L</b> | 0,4 | 0,2-3,5 | 0,05-0,30             |                |   |        |        |        |        |        |        |        |                       |        |        |        |                 |        |        | ●      |        |        |        |        |        |        | ●       | ●     |       |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

B

Fresatura

C

Foratura

D

Informazioni tecniche

E

Indice

Codice sistema > A48

Scelta gradi > A42

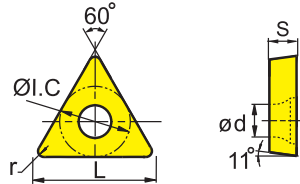
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

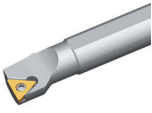
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TPGT  | L    | I.C  | S    | d   |
|-------|------|------|------|-----|
| 09 02 | 9,63 | 5,56 | 2,38 | 2,5 |
| 11 03 | 11   | 6,35 | 3,18 | 2,8 |

| TP** Inserti positivi                                                                               |               |     |           | HC' (CVD) |                |   |        |        |        |        |        |        |        | HC' (PVD) |        |        |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------------------------|---------------|-----|-----------|-----------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------|--------|--------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                    |               |     |           | P         | ●              | ● | ●      | ●      | ●      |        |        |        |        |           | ●      | ●      | ●      | ●       |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |           | M         |                |   |        |        |        | ●      | ●      |        |        |           | ●      | ●      | ●      | ●       | ●      | ●               | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |           | K         |                |   |        |        |        |        |        | ●      | ●      | ●         | ●      |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |           | N         |                |   |        |        |        |        |        |        |        | ●         | ●      |        |        |         |        |                 | ●      | ●      |        |        |        |        |        |         |       |       |
|                                                                                                     |               |     |           | S         |                |   |        |        |        |        |        |        |        |           |        | ●      | ●      | ●       | ●      | ●               |        | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                                     |               |     |           | H         |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                 |               |     |           | r         | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253    | YBD102 | YB7315 | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>SF<br>Finitura | TPGT090202-SF | 0,2 | 0,05-2,00 | 0,05-0,15 |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |                 | ○      |        |        |        |        | ●      | ●      |         |       |       |
|                                                                                                     | TPGT090204-SF | 0,4 | 0,05-2,00 | 0,05-0,25 |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |                 |        |        |        |        |        | ●      | ●      |         |       |       |
|                                                                                                     | TPGT090208-SF | 0,8 | 0,05-2,00 | 0,05-0,35 |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |                 |        |        |        |        |        | ●      |        |         |       |       |
|                                                                                                     | TPGT110302-SF | 0,2 | 0,05-2,00 | 0,05-0,15 |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |                 |        |        |        |        |        | ●      | ●      |         |       |       |
|                                                                                                     | TPGT110304-SF | 0,4 | 0,05-2,00 | 0,05-0,25 |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |                 |        |        |        |        | ○      | ●      |        |         |       |       |
|                                                                                                     | TPGT110308-SF | 0,8 | 0,05-2,00 | 0,05-0,35 |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |                 |        |        |        |        |        |        | ●      |         |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| S***-STUPR/L                                                                        | C***-STUPR/L                                                                        | E***-STFPR/L                                                                        |
| Kr: 93°                                                                             | Kr: 93°                                                                             | Kr: 90°                                                                             |
|  |  |  |
| A351                                                                                | A360                                                                                | A362                                                                                |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

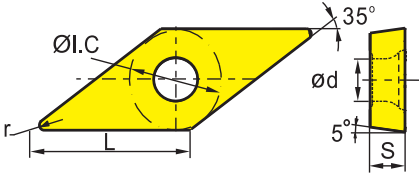
E

Indice

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VBMT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 02 | 11   | 6,35  | 2,38 | 2,8 |
| 11 03 | 11   | 6,35  | 3,18 | 2,8 |
| 16 04 | 16,5 | 9,525 | 4,76 | 4,4 |

| VB** Inserti positivi                                                             |                |               |                | HC <sup>1</sup> (CVD) |           |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         |        | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|----------------|---------------|----------------|-----------------------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |                |               |                | P                     | ●         | ●      | ●      | ●      | ●      | ●      |        |        |        |                       | ●      | ●       | ●      | ●      |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   |                |               |                | M                     |           |        |        |        |        | ●      | ●      |        |        |                       | ●      | ●       | ●      | ●      | ●               | ●      |        |        |        |        |        |         |       |       |
|                                                                                   |                |               |                | K                     |           |        |        |        |        |        |        | ●      | ●      | ●                     | ●      |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   |                |               |                | N                     |           |        |        |        |        |        |        |        |        |                       | ●      | ●       |        |        |                 |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                   |                |               |                | S                     |           |        |        |        |        |        |        |        |        |                       |        |         | ●      | ●      | ●               | ●      |        | ●      | ●      |        |        |         |       |       |
|                                                                                   |                |               |                | H                     |           |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                                                                               |                | r             | a <sub>p</sub> | f                     | YBC103    | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| AHF                                                                               | VBMT160404-AHF | 0,4           | 0,2-3,0        | 0,05-0,30             | ●         |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        | ●      |        |        |        |        |         |       |       |
|                                                                                   | VBMT160408-AHF | 0,8           | 0,8-3,5        | 0,08-0,40             | ●         |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        | ●      |        |        |        |        |         |       |       |
| Finitura                                                                          |                |               |                |                       |           |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| EF                                                                                | VBMT110302-EF  | 0,2           | 0,06-1,70      | 0,03-0,13             |           |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
|                                                                                   | VBMT110304-EF  | 0,4           | 0,1-1,7        | 0,05-0,19             |           |        |        |        |        |        | ●      |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
| Finitura                                                                          | VBMT110308-EF  | 0,8           | 0,13-1,70      | 0,07-0,26             |           |        |        |        |        |        | ●      |        |        |                       |        |         |        |        |                 | ○      |        |        |        |        |        |         |       |       |
|                                                                                   | VBMT160404-EF  | 0,4           | 0,1-1,8        | 0,05-0,20             |           |        |        |        |        |        | ●      |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
| Finitura                                                                          |                | VBMT160408-EF | 0,8            | 0,14-1,80             | 0,07-0,27 |        |        |        |        |        | ●      |        |        |                       |        |         |        |        |                 | ●      |        |        |        |        |        |         |       |       |
| XF                                                                                | VBMT110202-XF  | 0,2           | 0,5-2,0        | 0,08-0,20             |           |        | ○      |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   | VBMT110204-XF  | 0,4           | 0,5-2,0        | 0,08-0,20             | ●         |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| Finitura                                                                          | VBMT110302-XF  | 0,2           | 0,5-2,0        | 0,08-0,20             |           |        | ○      |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                   | VBMT110304-XF  | 0,4           | 0,5-2,0        | 0,08-0,20             | ●         |        |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| Finitura                                                                          |                | VBMT160404-XF | 0,4            | 0,5-2,5               | 0,08-0,20 | ●      |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| Finitura                                                                          |                | VBMT160408-XF | 0,8            | 0,5-2,5               | 0,08-0,25 | ●      |        |        |        |        |        |        |        |                       |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |            |              |              |              |
|---------------|---------|------------|--------------|--------------|--------------|
| SVJBR/L       | SVABR/L | SVVBN      | S***-SVQBR/L | S***-SVUBR/L | S***-SVXBR/L |
| Kr: 93°       | Kr: 90° | Kr: 72°30' | Kr: 107°30'  | Kr: 93°      | Kr: 93°      |
|               |         |            |              |              |              |
| A274          | A275    | A276       | A345         | A346         | A347         |

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

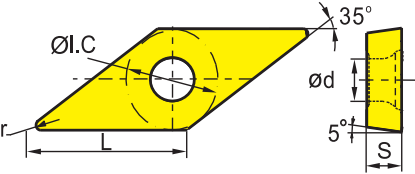
Dati di taglio > A366



## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VB**  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 02 | 11   | 6,35  | 2,38 | 2,8 |
| 16 04 | 16,5 | 9,525 | 4,76 | 4,4 |

| VB** Inserti positivi                                                             |               |     |         |           | HC <sup>1</sup> (CVD) |   |        |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |         |        |        |        | HT     |        | HC <sup>2</sup> | HW     |        |        |         |       |       |   |
|-----------------------------------------------------------------------------------|---------------|-----|---------|-----------|-----------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------|--------|--------|--------|--------|--------|-----------------|--------|--------|--------|---------|-------|-------|---|
|  |               |     |         |           | P                     | ● | ●      | ●      | ●      | ●      | ●      |        |        |        |        |        |                       |         | ●      | ●      |        | ●      | ●      | ●               |        |        |        |         |       |       |   |
|                                                                                   |               |     |         |           | M                     |   |        |        |        |        |        | ●      | ●      |        |        |        |                       |         |        |        | ●      | ●      | ●      | ●               | ●      | ●      | ●      | ●       | ●     |       |   |
|                                                                                   |               |     |         |           | K                     |   |        |        |        |        |        |        |        |        |        | ●      | ●                     | ●       | ●      |        |        |        |        |                 |        |        |        |         |       |       |   |
|                                                                                   |               |     |         |           | N                     |   |        |        |        |        |        |        |        |        |        |        |                       |         |        |        | ●      | ●      |        |                 |        |        |        |         |       | ●     | ● |
|                                                                                   |               |     |         |           | S                     |   |        |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |        |                 |        |        |        |         |       | ●     | ● |
|                                                                                   |               |     |         |           | H                     |   |        |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |        |                 |        |        |        |         |       |       |   |
| ISO                                                                               |               |     |         | r         | a <sub>p</sub>        | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152                | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201          | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |   |
| HF                                                                                | VBMT110202-HF | 0,2 | 0,2-2,0 | 0,05-0,15 |                       |   |        |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |        |                 |        |        |        |         |       |       |   |
|                                                                                   | VBMT110204-HF | 0,4 | 0,2-2,0 | 0,05-0,35 |                       |   |        |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |        |                 |        |        | ○      |         |       |       |   |
|                                                                                   | VBMT110208-HF | 0,8 | 0,2-2,0 | 0,05-0,40 |                       |   |        |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |        |                 |        |        |        |         |       |       |   |
| Finitura                                                                          |               |     |         |           |                       |   |        |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |        |                 |        |        |        |         |       |       |   |
| NF                                                                                | VBET160404-NF | 0,4 | 0,2-3,0 | 0,05-0,30 |                       |   |        |        |        |        |        |        |        |        |        |        |                       |         |        | ○      | ●      |        |        |                 |        |        |        |         |       |       |   |
|                                                                                   | VBET160408-NF | 0,8 | 0,2-3,0 | 0,08-0,40 |                       |   |        |        |        |        |        |        |        |        |        |        |                       |         |        | ○      | ●      |        |        |                 |        |        |        |         |       |       |   |
|                                                                                   |               |     |         |           |                       |   |        |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |        |                 |        |        |        |         |       |       |   |
| Finitura                                                                          |               |     |         |           |                       |   |        |        |        |        |        |        |        |        |        |        |                       |         |        |        |        |        |        |                 |        |        |        |         |       |       |   |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile |         |            |              |              |              |
|---------------|---------|------------|--------------|--------------|--------------|
| SVJBR/L       | SVABR/L | SVVBN      | S***-SVQBR/L | S***-SVUBR/L | S***-SVXBR/L |
| Kr: 93°       | Kr: 90° | Kr: 72°30' | Kr: 107°30'  | Kr: 93°      | Kr: 93°      |
|               |         |            |              |              |              |
| A274          | A275    | A276       | A345         | A346         | A347         |

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366

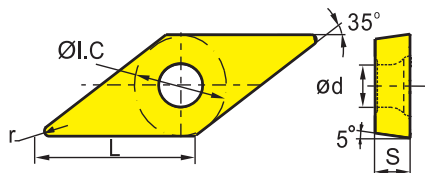
A

Tornitura

### Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VBGT  | L  | I.C  | S    | d   |
|-------|----|------|------|-----|
| 11 03 | 11 | 6,35 | 3,18 | 2,8 |

| VB** Inserti positivi                                                             |               |     |           | HC <sup>1</sup> (CVD) |                |   |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        |        | HT      | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|---------------|-----|-----------|-----------------------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|---------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |               |     |           | P                     | ●              | ● | ●      | ●      | ●      | ●      |        |        |        | ●                     | ●      | ●      | ●      | ●       |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |           | M                     |                |   |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●      | ●      | ●       | ●               |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |           | K                     |                |   |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |           | N                     |                |   |        |        |        |        |        |        |        | ●                     | ●      |        |        |         |                 | ●      | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |           | S                     |                |   |        |        |        |        |        |        |        | ●                     | ●      | ●      | ●      | ●       |                 | ●      | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                   |               |     |           | H                     |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                               |               |     |           | r                     | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253                | YBD102 | YB7315 | YBD152 | YBD152C | YBG101          | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| SF                                                                                | VBGT110302-SF | 0,2 | 0,05-2,00 | 0,05-0,15             |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        | ○      | ○      | ●      |         |       |       |
|                                                                                   | VBGT110304-SF | 0,4 | 0,05-2,00 | 0,05-0,20             |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        | ○      | ○      | ●      |         |       |       |
| Finitura                                                                          |               |     |           |                       |                |   |        |        |        |        |        |        |        |                       |        |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta

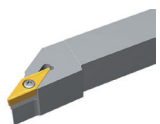
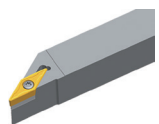
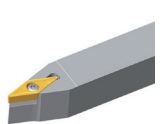
HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

B

Fresatura

C

Foratura

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SVJBR/L                                                                             | SVABR/L                                                                             | SVVBN                                                                               | S***-SVXBR/L                                                                        |
| Kr: 93°                                                                             | Kr: 90°                                                                             | Kr: 72°30'                                                                          | Kr: 93°                                                                             |
|  |  |  |  |
| A274                                                                                | A275                                                                                | A276                                                                                | A347                                                                                |

D

Informazioni tecniche

E

Indice

Codice sistema > A48

Scelta gradi > A42

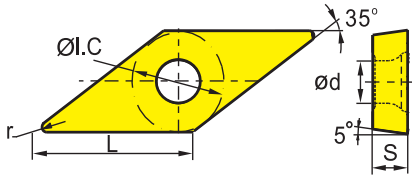
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

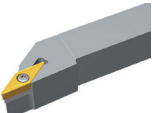
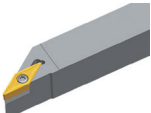
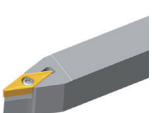
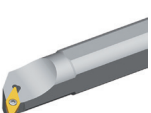
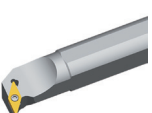
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VB**  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 03 | 11   | 6,35  | 3,18 | 2,8 |
| 16 04 | 16,5 | 9,525 | 4,76 | 4,4 |

| VB** Inserti positivi                                                             |                |               |           | HC' (CVD) |                |   |        |        |        |        |        |        |        |        |        | HC' (PVD) |        |         |        |        | HT     | HC²    | HW     |        |        |        |        |         |       |       |   |   |  |
|-----------------------------------------------------------------------------------|----------------|---------------|-----------|-----------|----------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|---|---|--|
|  |                |               |           | P         | ●              | ● | ●      | ●      | ●      | ●      |        |        |        |        |        |           | ●      | ●       | ●      | ●      | ●      |        |        |        |        |        |        |         |       |       |   |   |  |
|                                                                                   |                |               |           | M         |                |   |        |        |        |        | ●      | ●      |        |        |        |           |        | ●       | ●      | ●      | ●      | ●      | ●      | ●      | ●      | ●      | ●      |         |       |       |   |   |  |
|                                                                                   |                |               |           | K         |                |   |        |        |        |        |        |        | ●      | ●      | ●      | ●         |        |         |        |        |        |        |        |        |        |        |        |         |       |       |   |   |  |
|                                                                                   |                |               |           | N         |                |   |        |        |        |        |        |        |        |        |        |           | ●      | ●       |        |        |        |        |        |        |        |        |        |         |       | ●     | ● |   |  |
|                                                                                   |                |               |           | S         |                |   |        |        |        |        |        |        |        |        |        |           |        |         | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |         |       |       | ● | ● |  |
|                                                                                   |                |               |           | H         |                |   |        |        |        |        |        |        |        |        |        |           |        |         |        |        |        |        |        |        |        |        |        |         |       |       |   |   |  |
| ISO                                                                               |                |               |           | r         | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315    | YBD152 | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |   |   |  |
| NGF                                                                               | VBET160408-NGF | 0,8           | 0,2-3,0   | 0,08-0,30 |                |   |        |        |        |        |        |        |        |        |        |           |        |         |        |        | ●      |        |        |        |        |        |        |         |       |       |   |   |  |
|                                                                                   | VBET160412-NGF | 1,2           | 0,2-3,0   | 0,1-0,4   |                |   |        |        |        |        |        |        |        |        |        |           |        |         |        |        | ●      |        |        |        |        |        |        |         |       |       |   |   |  |
| Finitura                                                                          |                |               |           |           |                |   |        |        |        |        |        |        |        |        |        |           |        |         |        |        |        |        |        |        |        |        |        |         |       |       |   |   |  |
| EM                                                                                | VBMT110304-EM  | 0,4           | 0,15-2,00 | 0,07-0,20 |                |   |        |        |        |        |        |        | ●      |        |        |           |        |         |        |        |        | ●      |        |        |        |        |        |         |       |       |   |   |  |
|                                                                                   | VBMT110308-EM  | 0,8           | 0,2-2,0   | 0,09-0,27 |                |   | ○      |        |        |        |        |        | ●      |        |        |           |        |         |        |        |        | ●      |        |        |        |        |        |         |       |       |   |   |  |
| Media Lavor.                                                                      | VBMT160404-EM  | 0,4           | 0,23-2,70 | 0,07-0,20 |                |   |        |        |        |        |        |        | ●      |        |        |           |        |         |        |        |        | ●      |        |        |        |        |        |         |       |       |   |   |  |
|                                                                                   | VBMT160408-EM  | 0,8           | 0,45-2,70 | 0,09-0,27 |                |   |        |        |        |        |        |        | ●      |        |        |           |        |         |        |        |        | ●      |        |        |        |        |        |         |       |       |   |   |  |
| HM                                                                                | VBMT160404-HM  | 0,4           | 0,23-2,70 | 0,07-0,20 |                |   | ●      |        | ●      |        |        |        | ●      |        | ●      |           |        |         |        |        |        |        |        |        |        |        |        |         |       |       |   |   |  |
|                                                                                   | VBMT160408-HM  | 0,8           | 0,45-2,70 | 0,09-0,27 |                |   | ●      |        | ●      |        |        |        | ●      | ●      | ●      | ●         |        |         |        |        |        |        |        |        |        |        |        |         |       | ○     |   |   |  |
| Media Lavor.                                                                      |                | VBMT160412-HM | 1,2       | 0,54-2,70 | 0,11-0,32      |   |        | ●      |        | ●      |        |        |        |        |        |           |        |         |        |        |        |        |        |        |        |        |        |         |       |       |   |   |  |
| XM                                                                                | VBMT160404-XM  | 0,4           | 1-2,5     | 0,15-0,25 | ●              |   | ○      |        |        |        |        |        |        |        |        |           |        |         |        |        |        |        |        |        |        |        |        |         |       |       |   |   |  |
|                                                                                   | VBMT160408-XM  | 0,8           | 1-2,5     | 0,15-0,3  | ●              |   | ○      |        |        |        |        |        |        |        |        |           |        |         |        |        |        |        |        |        |        |        |        |         |       |       |   |   |  |
| Media Lavor.                                                                      |                | VBMT160412-XM | 1,2       | 1-2,5     | 0,15-0,35      | ● |        | ○      |        |        |        |        |        |        |        |           |        |         |        |        |        |        |        |        |        |        |        |         |       |       |   |   |  |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SVJBR/L                                                                             | SVABR/L                                                                             | SVVBN                                                                               | S***-SVQBR/L                                                                        | S***-SVUBR/L                                                                         | S***-SVXBR/L                                                                          |
| Kr: 93°                                                                             | Kr: 90°                                                                             | Kr: 72°30'                                                                          | Kr: 107°30'                                                                         | Kr: 93°                                                                              | Kr: 93°                                                                               |
|  |  |  |  |  |  |
| A274                                                                                | A275                                                                                | A276                                                                                | A345                                                                                | A346                                                                                 | A347                                                                                  |

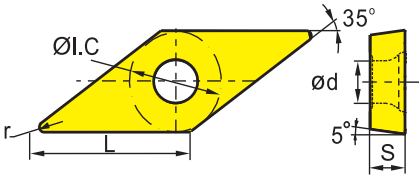
A

Tornitura

### Inseriti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VBMT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 16 04 | 16,5 | 9,525 | 4,76 | 4,4 |

| VB** Inserti positivi                                                             |                |     |                | HC <sup>1</sup> (CVD) |        |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |         | HT     | HC <sup>2</sup> | HW     |        |        |        |        |        |        |         |       |       |
|-----------------------------------------------------------------------------------|----------------|-----|----------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|---------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|  |                |     |                | P                     | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        | ●                     | ●      | ●       | ●      |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |                | M                     |        |        |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●       | ●      | ●               | ●      | ●      |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |                | K                     |        |        |        |        |        |        |        | ●      | ●      | ●                     | ●      |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                   |                |     |                | N                     |        |        |        |        |        |        |        |        |        | ●                     | ●      |         |        |                 |        | ●      | ●      |        |        |        |        |         |       |       |
|                                                                                   |                |     |                | S                     |        |        |        |        |        |        |        |        |        |                       | ●      | ●       | ●      | ●               | ●      |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                   |                |     |                | H                     |        |        |        |        |        |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                               |                | r   | a <sub>p</sub> | f                     | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315                | YBD152 | YBD152C | YBG101 | YBG102          | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
|  | VBMT160404-HR  | 0,4 | 0,5-3,0        | 0,1-0,3               |        |        | ●      |        | ●      |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | VBMT160408-HR  | 0,8 | 0,9-3,6        | 0,11-0,32             |        |        | ○      |        | ●      |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|                                                                                   | VBMT160412-HR  | 1,2 | 1,08-3,60      | 0,13-0,38             |        |        | ○      |        | ●      |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
| Sgrossatura                                                                       |                |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |
|  | VBMT160408-SNR | 0,8 | 0,5-4,0        | 0,1-0,3               |        |        |        |        |        |        |        |        |        |                       |        |         |        | ●               |        |        |        |        | ○      |        |        |         |       |       |
|                                                                                   | VBMT160412-SNR | 1,2 | 0,5-4,0        | 0,3-0,6               |        |        |        |        |        |        |        |        |        |                       |        |         |        |                 | ●      |        |        |        | ○      | ○      |        |         |       |       |
| Sgrossatura                                                                       |                |     |                |                       |        |        |        |        |        |        |        |        |        |                       |        |         |        |                 |        |        |        |        |        |        |        |         |       |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

B

Fresatura

C

Foratura

| Portautensile |         |            |              |              |              |
|---------------|---------|------------|--------------|--------------|--------------|
| SVJBR/L       | SVABR/L | SVVBN      | S***-SVQBR/L | S***-SVUBR/L | S***-SVXBR/L |
| Kr: 93°       | Kr: 90° | Kr: 72°30' | Kr: 107°30'  | Kr: 93°      | Kr: 93°      |
|               |         |            |              |              |              |
| A274          | A275    | A276       | A345         | A346         | A347         |

D

Informazioni tecniche

E

Indice

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Scelta gradi > A42

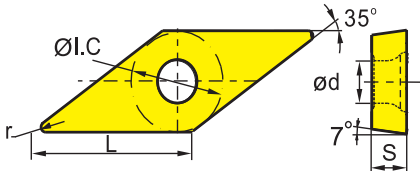
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VCGT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 03 | 11   | 6,35  | 3,18 | 2,8 |
| 16 04 | 16,5 | 9,525 | 4,76 | 4,4 |

| VC** Inserti positivi                                                             |               |     |                |           | HC' (CVD) |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        | HC' (PVD) |        |        |        |        | HT      |       | HC <sup>2</sup> | HW |   |  |  |   |   |
|-----------------------------------------------------------------------------------|---------------|-----|----------------|-----------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|-----------|--------|--------|--------|--------|---------|-------|-----------------|----|---|--|--|---|---|
|  |               |     |                |           | P         | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |        |         |        |        |        |        |           |        |        | ●      | ●      |         | ●     |                 |    |   |  |  |   |   |
|                                                                                   |               |     |                |           | M         |        |        |        |        |        |        | ●      | ●      |        |        |         |        |        |        |        |           | ●      | ●      | ●      | ●      | ●       | ●     | ●               | ●  | ● |  |  |   |   |
|                                                                                   |               |     |                |           | K         |        |        |        |        |        |        |        |        | ●      | ●      | ●       | ●      |        |        |        |           |        |        |        |        |         |       |                 |    |   |  |  |   |   |
|                                                                                   |               |     |                |           | N         |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |           | ●      | ●      |        |        |         |       |                 |    |   |  |  | ● | ● |
|                                                                                   |               |     |                |           | S         |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |           |        |        | ●      | ●      | ●       | ●     | ●               | ●  |   |  |  | ● | ● |
|                                                                                   |               |     |                |           | H         |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |           |        |        |        |        |         |       |                 |    |   |  |  |   |   |
| ISO                                                                               |               | r   | a <sub>p</sub> | f         | YBC103    | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102 | YB7315 | YBD152 | YBD152C | YBG101 | YBG102 | YBG105 | YBG205 | YB9320    | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201           |    |   |  |  |   |   |
| HF                                                                                | VCGT110304-HF | 0,4 | 0,2-2,0        | 0,05-0,30 |           |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        | ○         |        |        |        |        |         |       |                 |    |   |  |  |   |   |
|  |               |     |                |           |           |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |           |        |        |        |        |         |       |                 |    |   |  |  |   |   |
| Finitura                                                                          |               |     |                |           |           |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |           |        |        |        |        |         |       |                 |    |   |  |  |   |   |
| NF                                                                                | VCGT160408-NF | 0,8 | 0,2-2,0        | 0,1-0,4   |           |        |        |        |        |        |        |        |        |        |        |         |        |        | ●      |        |           |        |        |        |        |         |       |                 |    |   |  |  |   |   |
|  |               |     |                |           |           |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |           |        |        |        |        |         |       |                 |    |   |  |  |   |   |
| Finitura                                                                          |               |     |                |           |           |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |           |        |        |        |        |         |       |                 |    |   |  |  |   |   |
| SF                                                                                | VCGT110302-SF | 0,2 | 0,05-1,00      | 0,05-0,15 |           |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |           |        |        |        | ●      | ●       | ●     |                 |    |   |  |  |   |   |
|                                                                                   | VCGT110304-SF | 0,4 | 0,05-1,00      | 0,05-0,25 |           |        |        |        |        |        |        |        |        |        |        |         |        |        | ○      | ●      |           |        |        |        | ●      | ○       | ●     |                 |    |   |  |  |   |   |
|                                                                                   | VCGT160404-SF | 0,4 | 0,05-1,50      | 0,05-0,25 |           |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |           |        |        |        |        |         | ●     |                 |    |   |  |  |   |   |
| Finitura                                                                          |               |     |                |           |           |        |        |        |        |        |        |        |        |        |        |         |        |        |        |        |           |        |        |        |        |         |       |                 |    |   |  |  |   |   |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Carburo cementato non rivestito

| Portautensile |         |            |            |              |              |              |
|---------------|---------|------------|------------|--------------|--------------|--------------|
| SVVCN         | SVJCR/L | SVACR/L-SC | SVJCR/L-SC | S***-SVQCR/L | S***-SVUCR/L | C***-SVQCR/L |
| Kr: 72°30'    | Kr: 93° | Kr: 90°    | Kr: 93°    | Kr: 107°30'  | Kr: 93°      | Kr: 107°30'  |
|               |         |            |            |              |              |              |
| A277          | A278    | A312       | A313       | A343         | A344         | A363         |

| C***-SVUCR/L |
|--------------|
| Kr: 93°      |
|              |
| A364         |

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Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366



A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

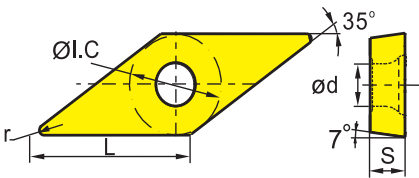
E

Indice

## Inseriti - Tornitura/Fresatura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VCGX  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 03 | 11   | 6,35  | 3,18 | 2,8 |
| 16 04 | 16,6 | 9,525 | 4,76 | 4,4 |
| 22 05 | 22   | 12,7  | 5,56 | 5,5 |

| VC ** Inserti - Tornitura/Fresatura                                                                     |               |     |         |           | HC <sup>1</sup> (CVD) |   |        |        |        |        |        |        |        |        | HC <sup>1</sup> (PVD) |        |        | HT      | HC <sup>2</sup> | HW     |        |        |        |        |        |        |        |         |       |       |
|---------------------------------------------------------------------------------------------------------|---------------|-----|---------|-----------|-----------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                        |               |     |         |           | P                     | ● | ●      | ●      | ●      | ●      | ●      |        |        |        |                       | ●      | ●      | ●       | ●               |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                         |               |     |         |           | M                     |   |        |        |        |        | ●      | ●      |        |        | ●                     | ●      | ●      | ●       | ●               | ●      | ●      |        |        |        |        |        |        |         |       |       |
|                                                                                                         |               |     |         |           | K                     |   |        |        |        |        |        |        | ●      | ●      | ●                     | ●      |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
|                                                                                                         |               |     |         |           | N                     |   |        |        |        |        |        |        |        |        | ●                     | ●      |        |         |                 |        |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                                         |               |     |         |           | S                     |   |        |        |        |        |        |        |        |        |                       | ●      | ●      | ●       | ●               | ●      |        |        | ●      | ●      |        |        |        |         |       |       |
|                                                                                                         |               |     |         |           | H                     |   |        |        |        |        |        |        |        |        |                       |        |        |         |                 |        |        |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                     |               |     |         | r         | a <sub>p</sub>        | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253 | YBD102                | YB7315 | YBD152 | YBD152C | YBG101          | YBG102 | YBG105 | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <br>Lavorazione<br>Al. | VCGX110301-LC | 0,1 | 0,3-3,0 | 0,05-0,10 |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         | ●               |        | ●      |        |        |        |        |        |        |         | ●     |       |
|                                                                                                         | VCGX110302-LC | 0,2 | 0,3-3,0 | 0,05-0,15 |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |                 | ●      |        | ○      |        |        |        |        |        |         | ●     |       |
|                                                                                                         | VCGX110304-LC | 0,4 | 0,5-3,0 | 0,1-0,3   |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |                 | ●      |        |        |        |        |        |        |        |         | ●     |       |
|                                                                                                         | VCGX110308-LC | 0,8 | 1-3     | 0,1-0,5   |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |                 | ●      |        |        |        |        |        |        |        |         | ●     |       |
|                                                                                                         | VCGX160404-LC | 0,4 | 0,5-5,0 | 0,1-0,3   |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |                 | ●      |        |        |        |        |        |        |        |         | ●     |       |
|                                                                                                         | VCGX160408-LC | 0,8 | 0,5-5,0 | 0,15-0,60 |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |                 | ●      |        |        |        |        |        |        |        |         | ●     |       |
|                                                                                                         | VCGX160412-LC | 1,2 | 0,5-5,0 | 0,15-0,80 |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |                 | ○      |        |        |        |        |        |        |        |         | ●     |       |
|                                                                                                         | VCGX220530-LC | 3   | 0,5-7,0 | 0,25-1,00 |                       |   |        |        |        |        |        |        |        |        |                       |        |        |         |                 | ●      |        |        |        |        |        |        |        |         | ○     | ●     |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile |         |            |            |              |              |              |
|---------------|---------|------------|------------|--------------|--------------|--------------|
| SVVCN         | SVJCR/L | SVACR/L-SC | SVJCR/L-SC | S***-SVQCR/L | S***-SVUCR/L | C***-SVQCR/L |
| Kr: 72°30'    | Kr: 93° | Kr: 90°    | Kr: 93°    | Kr: 107°30'  | Kr: 93°      | Kr: 107°30'  |
|               |         |            |            |              |              |              |
| A277          | A278    | A312       | A313       | A343         | A344         | A363         |
| C***-SVUCR/L  |         |            |            |              |              |              |
| Kr: 93°       |         |            |            |              |              |              |
|               |         |            |            |              |              |              |
| A364          |         |            |            |              |              |              |

Codice sistema > A48

Scelta gradi > A42

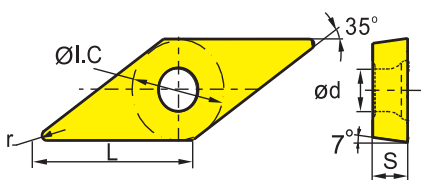
Informazioni tecniche > A501

Dati di taglio > A366

| VCGX  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 02 | 11   | 6,35  | 2,38 | 2,8 |
| 11 03 | 11   | 6,35  | 3,18 | 2,8 |
| 16 04 | 16,6 | 9,525 | 4,76 | 4,4 |
| 22 05 | 22   | 12,7  | 5,56 | 5,5 |

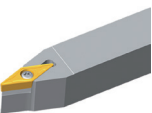
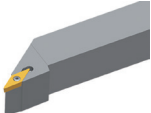
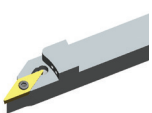
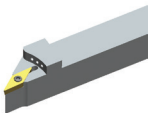
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura/Fresatura

| VC ** Inserti - Tornitura/Fresatura                                                                                                   |               |     |         | HC' (CVD) |                |   |        |        |        |        |        |        |        | HC' (PVD) |        |        |        |         | HT     |        | HC <sup>2</sup> |        | HW     |        |        |        |        |         |       |       |
|---------------------------------------------------------------------------------------------------------------------------------------|---------------|-----|---------|-----------|----------------|---|--------|--------|--------|--------|--------|--------|--------|-----------|--------|--------|--------|---------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|
|                                                      |               |     |         | P         | ●              | ● | ●      | ●      | ●      | ●      |        |        |        |           | ●      | ●      |        | ●       | ●      | ●      |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                                       |               |     |         | M         |                |   |        |        |        | ●      | ●      |        |        |           | ●      | ●      | ●      | ●       | ●      | ●      | ●               | ●      |        |        |        |        |        |         |       |       |
|                                                                                                                                       |               |     |         | K         |                |   |        |        |        |        |        | ●      | ●      | ●         | ●      |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
|                                                                                                                                       |               |     |         | N         |                |   |        |        |        |        |        |        |        |           | ●      | ●      |        |         |        |        |                 |        |        |        | ●      | ●      |        |         |       |       |
|                                                                                                                                       |               |     |         | S         |                |   |        |        |        |        |        |        |        |           |        |        | ●      | ●       | ●      | ●      | ●               | ●      |        |        |        | ●      | ●      |         |       |       |
|                                                                                                                                       |               |     |         | H         |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |        |                 |        |        |        |        |        |        |         |       |       |
| ISO                                                                                                                                   |               |     |         | r         | a <sub>p</sub> | f | YBC103 | YB6315 | YBC152 | YBC203 | YBC252 | YBC352 | YBM153 | YBM253    | YBD102 | YB7315 | YBD152 | YBD152C | YBG101 | YBG102 | YBG105          | YBG205 | YB9320 | YPD201 | YBS103 | YNG151 | YNT251 | YNG151C | YD101 | YD201 |
| <div>LH</div> <div></div> <div>Lavorazione Al.</div> | VCGX110204-LH | 0,4 | 0,5-3,0 | 0,1-0,3   |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        | ●      |                 |        |        |        |        |        |        |         | ●     |       |
|                                                                                                                                       | VCGX110301-LH | 0,1 | 0,5-3,0 | 0,05-0,10 |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |        |                 |        |        |        |        |        |        |         | ●     | ●     |
|                                                                                                                                       | VCGX110302-LH | 0,2 | 0,3-3,0 | 0,05-0,15 |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |        | ●               |        |        |        |        |        |        |         | ●     | ○     |
|                                                                                                                                       | VCGX110304-LH | 0,4 | 0,5-3,0 | 0,1-0,3   |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |        | ●               |        |        |        |        |        |        |         | ●     | ○     |
|                                                                                                                                       | VCGX110308-LH | 0,8 | 0,5-3,0 | 0,15-0,60 |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |        | ○               |        |        |        |        |        |        |         | ●     |       |
|                                                                                                                                       | VCGX160402-LH | 0,2 | 0,5-5,0 | 0,05-0,10 |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |        | ●               |        |        |        |        |        |        |         | ●     |       |
|                                                                                                                                       | VCGX160404-LH | 0,4 | 0,5-5,0 | 0,1-0,3   |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |        | ●               |        |        |        |        |        |        |         | ●     |       |
|                                                                                                                                       | VCGX160408-LH | 0,8 | 0,5-5,0 | 0,15-0,60 |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |        | ●               |        |        |        |        |        |        |         | ●     |       |
|                                                                                                                                       | VCGX160412-LH | 1,2 | 0,5-5,0 | 0,15-0,80 |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |        | ○               |        |        |        |        |        |        |         | ●     |       |
|                                                                                                                                       | VCGX220530-LH | 3   | 0,5-7,0 | 0,25-1,00 |                |   |        |        |        |        |        |        |        |           |        |        |        |         |        |        | ○               |        |        |        |        |        |        |         | ●     | ○     |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SVVCN                                                                               | SVJCR/L                                                                             | SVACR/L-SC                                                                          | SVJCR/L-SC                                                                          | S***-SVQCR/L                                                                         | S***-SVUCR/L                                                                          | C***-SVQCR/L                                                                          |
| Kr: 72°30'                                                                          | Kr: 93°                                                                             | Kr: 90°                                                                             | Kr: 93°                                                                             | Kr: 107°30'                                                                          | Kr: 93°                                                                               | Kr: 107°30'                                                                           |
|  |  |  |  |  |  |  |
| A277                                                                                | A278                                                                                | A312                                                                                | A313                                                                                | A343                                                                                 | A344                                                                                  | A363                                                                                  |
| C***-SVUCR/L                                                                        |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| Kr: 93°                                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A364                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

Codice sistema > A48

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366



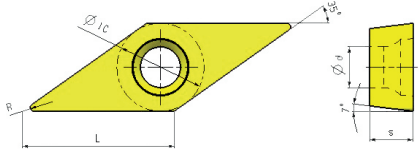
A

Tornitura

## Inserti - Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VCMT  | L  | I.C   | S    | d   |
|-------|----|-------|------|-----|
| 11 03 | 11 | 6,35  | 3,18 | 2,8 |
| 16 04 | 16 | 9,525 | 4,76 | 4,4 |

| VC** Inserti positivi                                                               |                                                                                                 |     |                |           | HC <sup>1</sup> (CVD) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | HC <sup>1</sup> (PVD)                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     | HT                                                                                  | HC <sup>2</sup>                                                                     | HW                                                                                  |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----|----------------|-----------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|
|    |                                                                                                 |     |                |           | P                     |  |  |  |  |  |  |                                                                                   |                                                                                   |                                                                                    |                                                                                     |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
|                                                                                     |                                                                                                 |     |                |           | M                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |  |  |  |  |  |  |  |        |                                                                                     |                                                                                     |                                                                                     |       |
|                                                                                     |                                                                                                 |     |                |           | K                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
|                                                                                     |                                                                                                 |     |                |           | N                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |  |  |                                                                                     |       |
|                                                                                     |                                                                                                 |     |                |           | S                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |        |                                                                                     |  |  |       |
|                                                                                     |                                                                                                 |     |                |           | H                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
| ISO                                                                                 |                                                                                                 | r   | a <sub>p</sub> | f         | YBC103                | YB6315                                                                            | YBC152                                                                            | YBC203                                                                            | YBC252                                                                            | YBC352                                                                            | YBM153                                                                            | YBM253                                                                            | YBD102                                                                            | YB7315                                                                             | YBD152                                                                              | YBD152C                                                                             | YBG101                                                                              | YBG102                                                                              | YBG105                                                                              | YBG205                                                                              | YB9320                                                                              | YPD201                                                                              | YBS103                                                                              | YNG151 | YNT251                                                                              | YNG151C                                                                             | YD101                                                                               | YD201 |
| XF                                                                                  | VCMT110302-XF                                                                                   | 0,2 | 0,5-2,0        | 0,08-0,20 |                       |                                                                                   |                                                                                   |                                                                                   | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
|                                                                                     | VCMT110304-XF                                                                                   | 0,4 | 0,5-2,0        | 0,08-0,20 | ●                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
|                                                                                     |  VCMT110308-XF | 0,8 | 0,5-2,0        | 0,08-0,25 | ●                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
|                                                                                     | VCMT160404-XF                                                                                   | 0,4 | 0,5-2,5        | 0,08-0,20 | ●                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
| Finitura                                                                            | VCMT160408-XF                                                                                   | 0,8 | 0,5-2,5        | 0,08-0,25 | ●                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
| EF                                                                                  | VCMT160404-EF                                                                                   | 0,4 | 0,5-2,5        | 0,05-0,20 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
|    |                                                                                                 |     |                |           |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
| Media Lavor.                                                                        |                                                                                                 |     |                |           |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
| EM                                                                                  | VCMT160404-EM                                                                                   | 0,4 | 0,5-2,5        | 0,05-0,35 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ○                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
|  | VCMT160408-EM                                                                                   | 0,8 | 0,5-2,5        | 0,10-0,45 |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ○                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
| Media Lavor.                                                                        |                                                                                                 |     |                |           |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
| XM                                                                                  | VCMT160412-XM                                                                                   | 1,2 | 1-2,5          | 0,15-0,35 | ○                     |                                                                                   | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
|  |                                                                                                 |     |                |           |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |
| Media Lavor.                                                                        |                                                                                                 |     |                |           |                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                                                                     |                                                                                     |                                                                                     |       |

● In magazzino ○ Su richiesta  
disponibili YBC152F, YBC252F, YBM153F, YBM253F

HC<sup>1</sup> Carburo cementato rivestito  
HT Cermet non rivestito  
HC<sup>2</sup> Cermet rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

E

Indice

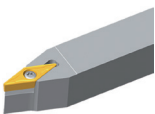
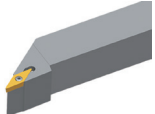
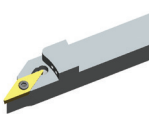
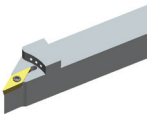
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Dati di taglio > A366



| Portautensile                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>SVVCN</b><br>Kr: 72°30'                                                        | <b>SVJCR/L</b><br>Kr: 93°                                                         | <b>SVACR/L-SC</b><br>Kr: 90°                                                      | <b>SVJCR/L-SC</b><br>Kr: 93°                                                      | <b>S***-SVQCR/L</b><br>Kr: 107°30'                                                 | <b>S***-SVUCR/L</b><br>Kr: 93°                                                      | <b>C***-SVQCR/L</b><br>Kr: 107°30'                                                  |
|  |  |  |  |  |  |  |
| A277                                                                              | A278                                                                              | A312                                                                              | A313                                                                              | A343                                                                               | A344                                                                                | A363                                                                                |

|                                                                                   |
|-----------------------------------------------------------------------------------|
| <b>C***-SVUCR/L</b><br>Kr: 93°                                                    |
|  |
| A364                                                                              |

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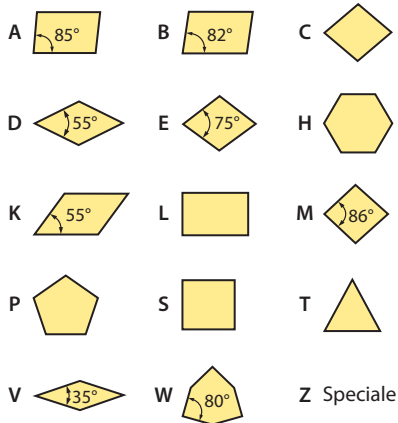
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**C N G A 12 04 08 T 020 20 – 2 (W)**

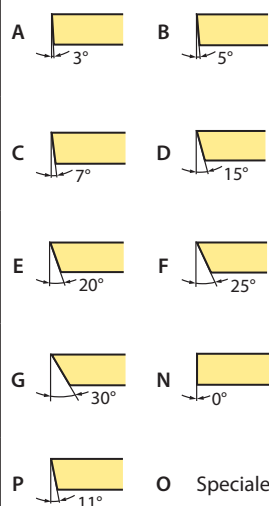
**1 2 3 4 5 6 7 8 9 10 11 12**

Forma dell'inserto



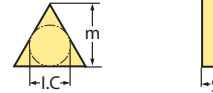
**1**

Angolo di spoglia inferiore



**2**

Grado di tolleranza

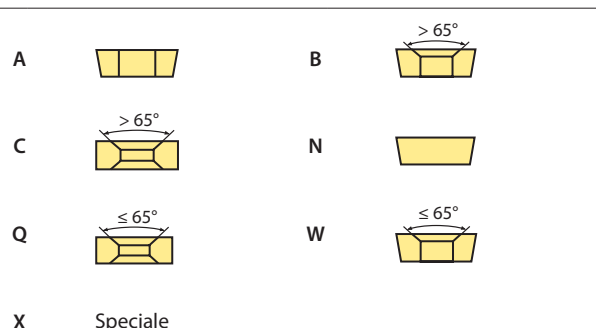


| Code | I.C [mm]   | m [mm]     | S [mm] |
|------|------------|------------|--------|
| A    | ±0,025     | ±0,005     | ±0,025 |
| C    | ±0,025     | ±0,013     | ±0,025 |
| E    | ±0,025     | ±0,025     | ±0,025 |
| F    | ±0,013     | ±0,005     | ±0,025 |
| G    | ±0,025     | ±0,025     | ±0,130 |
| H    | ±0,013     | ±0,013     | ±0,025 |
| J    | ±0,05–0,15 | ±0,005     | ±0,025 |
| K    | ±0,05–0,15 | ±0,013     | ±0,025 |
| L    | ±0,05–0,15 | ±0,025     | ±0,025 |
| M    | ±0,05–0,15 | ±0,08–0,20 | ±0,130 |
| N    | ±0,05–0,15 | ±0,08–0,20 | ±0,025 |
| U    | ±0,08–0,25 | ±0,13–0,38 | ±0,130 |

**3**

Caratteristiche di fissaggio (metrico)

Forma dell'inserto

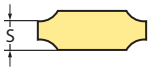
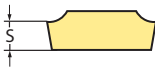


**4**

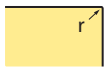
Lunghezza tagliente [mm]

| I.C [mm] | Forma dell'inserto |    |    |    |    |    |
|----------|--------------------|----|----|----|----|----|
|          | C                  | D  | S  | T  | V  | W  |
| 3,97     |                    |    |    |    |    |    |
| 5,0      |                    |    |    |    |    |    |
| 5,56     |                    |    |    |    |    |    |
| 6,0      |                    |    |    |    |    |    |
| 6,35     | 06                 | 07 |    | 11 | 11 |    |
| 8,0      |                    |    |    |    |    |    |
| 9,525    | 09                 | 11 | 09 | 16 | 16 | 06 |
| 10,0     |                    |    |    |    |    |    |
| 12,0     |                    |    |    |    |    |    |
| 12,7     | 12                 | 15 | 12 | 22 | 22 | 08 |
| 15,875   | 16                 |    | 15 | 27 |    |    |
| 16,0     |                    | 19 |    |    |    |    |
| 19,05    | 19                 |    | 19 | 33 |    |    |
| 20,0     |                    |    |    |    |    |    |
| 25,0     | 25                 | 25 |    |    |    |    |
| 25,4     |                    |    | 25 |    |    |    |
| 31,75    |                    |    |    |    |    |    |
| 32       |                    |    |    |    |    |    |

**5**

| Spessore dell'inserto S [mm]                                                      |      |                                                                                   |       |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|-------|
|  |      |  |       |
| Code                                                                              | S    | Code                                                                              | S     |
| 02                                                                                | 2,38 | 06                                                                                | 6,35  |
| T2                                                                                | 2,58 | T6                                                                                | 6,75  |
| 03                                                                                | 3,18 | 07                                                                                | 7,94  |
| T3                                                                                | 3,97 | 09                                                                                | 9,52  |
| 04                                                                                | 4,76 | T9                                                                                | 9,72  |
| T4                                                                                | 4,96 | 11                                                                                | 11,11 |
| 05                                                                                | 5,56 | 12                                                                                | 12,70 |
| T5                                                                                | 5,95 |                                                                                   |       |
|                                                                                   |      |                                                                                   |       |
|                                                                                   |      |                                                                                   |       |

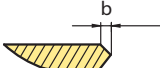
6

| Raggio di punta r [mm]                                                            |                 |
|-----------------------------------------------------------------------------------|-----------------|
|  |                 |
| Code                                                                              | r               |
| 00                                                                                | –               |
| 02                                                                                | 0,2             |
| 04                                                                                | 0,4             |
| 08                                                                                | 0,8             |
| 12                                                                                | 1,2             |
| 16                                                                                | 1,6             |
| 20                                                                                | 2,0             |
| 24                                                                                | 2,4             |
| 32                                                                                | 3,2             |
| X                                                                                 | Speciale        |
| MO                                                                                | Inserto rotondo |

7

| Versione del tagliente |                         |                                                                                     |
|------------------------|-------------------------|-------------------------------------------------------------------------------------|
| Code                   | Tagliente               | Forma dell'inserto                                                                  |
| E                      | Arrotondato             |  |
| F                      | Spigolo vivo            |  |
| T                      | Smusso                  |  |
| S                      | Smusso + Arrotondamento |  |

8

| Larghezza smusso b [mm]                                                           |      |
|-----------------------------------------------------------------------------------|------|
|  |      |
| Code                                                                              | b    |
| 010                                                                               | 0,10 |
| 015                                                                               | 0,15 |
| 020                                                                               | 0,20 |
| 025                                                                               | 0,25 |
| 030                                                                               | 0,30 |
| 035                                                                               | 0,35 |
| 040                                                                               | 0,40 |
| 045                                                                               | 0,45 |
| 050                                                                               | 0,50 |
| 100                                                                               | 1,00 |
| 200                                                                               | 2,00 |

9

| Angolo dello smusso α                                                             |     |
|-----------------------------------------------------------------------------------|-----|
|  |     |
| Code                                                                              | α   |
| 05                                                                                | 5°  |
| 10                                                                                | 10° |
| 15                                                                                | 15° |
| 20                                                                                | 20° |
| 25                                                                                | 25° |
| 30                                                                                | 30° |
|                                                                                   |     |
|                                                                                   |     |
|                                                                                   |     |

10

| Numero taglienti |                                                                                       |
|------------------|---------------------------------------------------------------------------------------|
| Code             | Forma                                                                                 |
| 1                |    |
| 2                |  |
| 3                |  |
| 4                |  |

11

| Extra   |                                                    |
|---------|----------------------------------------------------|
| Code    | Descrizione                                        |
| W       | Wiper                                              |
| HS      | Riporto -FULL FACE- unilaterale                    |
| M       | Nicchia per fissaggio (CBN integrale)              |
| CB      | Rompitruciolo (CBN)                                |
| MED     | Rompitruciolo per finitura – taglio medio (PCD)    |
| ROF     | Rompitruciolo per taglio medio – sgrossatura (PCD) |
| L (L/R) | Riporto tagliente completo (PCD)                   |

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- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CNGA  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 12 04 | 12,9 | 12,7 | 4,76 | 5,16 |

## Inserti - Tornitura (CBN)

| CN** Inserti negativi |     |                |           |  | BL (CBN) |        |        | BC (CBN) |         |         | BH (CBN) |        |  |
|-----------------------|-----|----------------|-----------|--|----------|--------|--------|----------|---------|---------|----------|--------|--|
|                       |     |                |           |  | P        |        |        |          |         |         |          |        |  |
|                       |     |                |           |  | M        |        |        |          |         |         |          |        |  |
|                       |     |                |           |  | K        |        |        |          |         |         |          |        |  |
|                       |     |                |           |  | N        |        |        |          |         |         |          |        |  |
|                       |     |                |           |  | S        |        |        |          |         |         |          |        |  |
|                       |     |                |           |  | H        |        |        |          |         |         |          |        |  |
| ISO                   | r   | a <sub>p</sub> | f         |  | YCB112   | YCB113 | YCB121 | YCB131   | YCB113C | YCB121C | YCB131C  | YCB215 |  |
| CNGA120402S01020-2    | 0,2 | 0,08-0,50      | 0,05-0,15 |  |          | ○      |        |          |         | ○       |          |        |  |
| CNGA120402S01225-2    | 0,2 | 0,08-0,50      | 0,05-0,15 |  | ○        |        |        |          |         | ○       |          |        |  |
| CNGA120404E-2         | 0,4 | 0,08-0,50      | 0,05-0,20 |  | ○        |        | ○      |          |         |         |          |        |  |
| CNGA120404S01020-2    | 0,4 | 0,08-0,50      | 0,05-0,20 |  |          | ●      |        |          |         | ○       |          | ○      |  |
| CNGA120404S01225-2    | 0,4 | 0,08-0,50      | 0,05-0,20 |  |          | ●      |        |          |         | ○       |          |        |  |
| CNGA120408E-2         | 0,8 | 0,08-0,50      | 0,05-0,25 |  | ○        |        | ○      |          |         |         |          |        |  |
| CNGA120408S01525-2    | 0,8 | 0,08-0,50      | 0,05-0,25 |  |          | ●      | ●      |          |         | ●       |          |        |  |
| CNGA120408S02020-2    | 0,8 | 0,08-0,50      | 0,05-0,25 |  |          | ●      |        |          |         | ●       |          |        |  |
| CNGA120412E-2         | 1,2 | 0,08-0,50      | 0,05-0,30 |  | ○        |        | ○      |          |         |         |          |        |  |
| CNGA120412S01020-2    | 1,2 | 0,08-0,50      | 0,05-0,30 |  |          | ●      |        |          |         |         |          | ●      |  |
| CNGA120412S01525-2    | 1,2 | 0,08-0,50      | 0,05-0,30 |  |          | ●      | ●      |          |         | ●       |          |        |  |
| CNGA120412S02020-2    | 1,2 | 0,08-0,50      | 0,05-0,30 |  |          | ●      |        |          |         | ○       |          |        |  |
| CNGA120416S01020-2    | 1,6 | 0,08-0,50      | 0,05-0,35 |  |          |        |        |          |         |         |          | ○      |  |
| CNGA120416S01525-2    | 1,6 | 0,08-0,50      | 0,05-0,35 |  | ○        | ○      |        |          |         | ○       |          |        |  |
| CNGA120416S02020-2    | 1,6 | 0,08-0,50      | 0,05-0,35 |  |          | ○      |        |          |         | ○       |          |        |  |
| CNGA120408S01525-2W   | 0,8 | 0,08-0,50      | 0,05-0,25 |  |          | ●      | ○      |          |         | ○       |          |        |  |
| CNGA120408S02020-2W   | 0,8 | 0,08-0,50      | 0,05-0,25 |  |          |        |        |          |         | ○       |          |        |  |

● In magazzino ○ Su richiesta

BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

| Portautensile |         |         |         |         |              |
|---------------|---------|---------|---------|---------|--------------|
| DCLNR/L       | PCBNR/L | PCLNR/L | MCBNR/L | MCLNR/L | S***-PCLNR/L |
| Kr: 95°       | Kr: 75° | Kr: 95° | Kr: 75° | Kr: 95° | Kr: 95°      |
|               |         |         |         |         |              |
| A230          | A237    | A238    | A252    | A253    | A324         |

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## Inserti - Tornitura (CBN)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DNGA  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 15 06 | 15,5 | 12,7 | 6,35 | 5,16 |

| DN** Inserti negativi |                    |  |  | BL (CBN) |                |           |        | BC (CBN) |        |        | BH (CBN) |         |         |        |
|-----------------------|--------------------|--|--|----------|----------------|-----------|--------|----------|--------|--------|----------|---------|---------|--------|
|                       |                    |  |  | P        |                |           |        |          |        |        |          |         |         |        |
|                       |                    |  |  | M        |                |           |        |          |        |        |          |         |         |        |
|                       |                    |  |  | K        |                |           |        |          |        |        |          |         |         |        |
|                       |                    |  |  | N        |                |           |        |          |        |        |          |         |         |        |
|                       |                    |  |  | S        | ●              | ●         | ●      |          |        |        |          |         |         |        |
|                       |                    |  |  | H        | ○              | ○         | ○      | ○        | ○      | ○      |          |         |         |        |
| ISO                   |                    |  |  | r        | a <sub>p</sub> | f         | YCB112 | YCB113   | YCB121 | YCB131 | YCB113C  | YCB121C | YCB131C | YCB215 |
|                       | DNGA150604E-2      |  |  | 0,4      | 0,08-0,50      | 0,05-0,20 | ○      |          | ○      |        |          |         |         |        |
|                       | DNGA150604S01020-2 |  |  | 0,4      | 0,08-0,50      | 0,05-0,20 |        |          | ○      |        |          | ○       |         | ○      |
|                       | DNGA150604S01225-2 |  |  | 0,4      | 0,08-0,50      | 0,05-0,20 | ○      |          | ○      |        | ○        |         |         |        |
|                       | DNGA150608E-2      |  |  | 0,8      | 0,08-0,50      | 0,05-0,25 | ○      |          | ○      |        |          |         |         |        |
|                       | DNGA150608S01020-2 |  |  | 0,8      | 0,08-0,50      | 0,05-0,25 |        |          |        |        |          |         |         | ○      |
|                       | DNGA150608S01525-2 |  |  | 0,8      | 0,08-0,50      | 0,05-0,25 | ●      |          | ●      |        | ●        |         |         |        |
|                       | DNGA150608S02020-2 |  |  | 0,8      | 0,08-0,50      | 0,05-0,25 |        |          | ●      |        | ●        |         |         |        |
|                       | DNGA150612S01020-2 |  |  | 1,2      | 0,08-0,50      | 0,05-0,30 |        |          |        |        |          |         |         | ○      |
|                       | DNGA150612S01525-2 |  |  | 1,2      | 0,08-0,50      | 0,05-0,30 | ●      |          | ○      |        | ○        |         |         |        |
|                       | DNGA150612S02020-2 |  |  | 1,2      | 0,08-0,50      | 0,05-0,30 |        |          | ●      |        | ○        |         |         |        |

● In magazzino ○ Su richiesta

BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

| Portautensile |         |         |         |            |              |              |
|---------------|---------|---------|---------|------------|--------------|--------------|
| DDJNR/L       | PDJNR/L | PDNNR/L | MDJNR/L | MDPNN      | S***-PDSNR/L | S***-PDUNR/L |
| Kr: 93°       | Kr: 93° | Kr: 63° | Kr: 93° | Kr: 62°30' | Kr: 62°30'   | Kr: 93°      |
|               |         |         |         |            |              |              |
| A231          | A240    | A241    | A254    | A255       | A326         | A327         |

A

Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SNGA  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 12 04 | 12,7 | 12,7 | 4,76 | 5,16 |

## Inserti - Tornitura (CBN)

| SN** Inserti negativi |          |  |  | BL (CBN) | BC (CBN) | BH (CBN) |
|-----------------------|----------|--|--|----------|----------|----------|
|                       | <b>P</b> |  |  |          |          |          |
|                       | <b>M</b> |  |  |          |          |          |
|                       | <b>K</b> |  |  |          |          |          |
|                       | <b>N</b> |  |  |          |          |          |
|                       | <b>S</b> |  |  |          |          |          |
|                       | <b>H</b> |  |  |          |          |          |

B

Fresatura

| ISO                       | r   | a <sub>p</sub> | f         | YCB112 | YCB113 | YCB121 | YCB131 | YCB113C | YCB121C | YCB131C | YCB215 |
|---------------------------|-----|----------------|-----------|--------|--------|--------|--------|---------|---------|---------|--------|
| <b>SNGA120408S01020-4</b> | 0,8 | 0,08-0,50      | 0,05-0,25 |        |        |        |        |         |         |         |        |
| <b>SNGA120408S01525-4</b> | 0,8 | 0,08-0,50      | 0,05-0,25 |        |        |        |        |         |         |         |        |
| <b>SNGA120408S02020-4</b> | 0,8 | 0,08-0,50      | 0,05-0,25 |        |        |        |        |         |         |         |        |
| <b>SNGA120412S01020-4</b> | 1,2 | 0,08-0,50      | 0,05-0,30 |        |        |        |        |         |         |         |        |
| <b>SNGA120412S01525-4</b> | 1,2 | 0,08-0,50      | 0,05-0,30 |        |        |        |        |         |         |         |        |
| <b>SNGA120412S02020-4</b> | 1,2 | 0,08-0,50      | 0,05-0,30 |        |        |        |        |         |         |         |        |

● In magazzino ○ Su richiesta

BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

C

Foratura

| Portautensile |         |         |         |         |         |         |
|---------------|---------|---------|---------|---------|---------|---------|
| DSBNR/L       | PSBNR/L | PSDNN   | PSKNR/L | PSSNR/L | MSBNR/L | MSRNR/L |
| Kr: 75°       | Kr: 75° | Kr: 45° | Kr: 75° | Kr: 45° | Kr: 75° | Kr: 75° |
|               |         |         |         |         |         |         |
| A232          | A242    | A244    | A245    | A246    | A256    | A257    |

D

Informazioni tecniche

| MSKNR/L | MSDNN   | S***-PSKNR/L |
|---------|---------|--------------|
| Kr: 75° | Kr: 45° | Kr: 75°      |
|         |         |              |
| A258    | A259    | A329         |

E

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## Inseriti - Tornitura (CBN)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TNGA  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,5 | 9,525 | 4,76 | 3,81 |

| TN** Inserti negativi |                    |                |           | BL (CBN)  |        |        |        | BC (CBN) |         |         |  | BH (CBN) |  |  |  |
|-----------------------|--------------------|----------------|-----------|-----------|--------|--------|--------|----------|---------|---------|--|----------|--|--|--|
|                       |                    |                |           | P         |        |        |        |          |         |         |  |          |  |  |  |
|                       |                    |                |           | M         |        |        |        |          |         |         |  |          |  |  |  |
|                       |                    |                |           | K         |        |        |        |          |         |         |  |          |  |  |  |
|                       |                    |                |           | N         |        |        |        |          |         |         |  |          |  |  |  |
|                       |                    |                |           | S         | ●      | ●      |        |          |         |         |  |          |  |  |  |
|                       |                    |                |           | H         | ○      | ●      | ●      | ○        | ●       | ●       |  |          |  |  |  |
| ISO                   | r                  | a <sub>p</sub> | f         | YCB112    | YCB113 | YCB121 | YCB131 | YCB113C  | YCB121C | YCB131C |  | YCB215   |  |  |  |
|                       | TNGA160404S01020-3 | 0,4            | 0,08-0,50 | 0,05-0,20 |        | ○      |        |          | ○       |         |  | ○        |  |  |  |
|                       | TNGA160404S01225-3 | 0,4            | 0,08-0,50 | 0,05-0,20 | ○      |        |        |          | ○       |         |  |          |  |  |  |
|                       | TNGA160408S01020-3 | 0,8            | 0,08-0,50 | 0,05-0,25 |        |        |        |          |         |         |  | ○        |  |  |  |
|                       | TNGA160408S01525-3 | 0,8            | 0,08-0,50 | 0,05-0,25 | ○      | ○      |        |          | ○       |         |  |          |  |  |  |
|                       | TNGA160408S02020-3 | 0,8            | 0,08-0,50 | 0,05-0,25 |        | ●      |        |          | ○       |         |  |          |  |  |  |
|                       | TNGA160412S01020-3 | 1,2            | 0,08-0,50 | 0,05-0,30 |        |        |        |          |         |         |  | ○        |  |  |  |
|                       | TNGA160412S01525-3 | 1,2            | 0,08-0,50 | 0,05-0,30 | ○      | ○      |        |          | ○       |         |  |          |  |  |  |
|                       | TNGA160412S02020-3 | 1,2            | 0,08-0,50 | 0,05-0,30 |        | ○      |        |          | ○       |         |  |          |  |  |  |

● In magazzino ○ Su richiesta

BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

| Portautensile |              |         |         |         |         |           |
|---------------|--------------|---------|---------|---------|---------|-----------|
| DTGNR/L       | PTFNR/L      | PTTNR/L | PTGNR/L | MTGNR/L | MTJNR/L | MTJNR/L-Z |
| Kr: 91°       | Kr: 91°      | Kr: 60° | Kr: 90° | Kr: 90° | Kr: 93° | Kr: 93°   |
|               |              |         |         |         |         |           |
| A233          | A247         | A248    | A249    | A260    | A261    | A262      |
| MTFNR/L       | S***.PTFNR/L |         |         |         |         |           |
| Kr: 91°       | Kr: 90°      |         |         |         |         |           |
|               |              |         |         |         |         |           |
| A263          | A330         |         |         |         |         |           |

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- Buone condizioni di lavorazione
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- Condizioni di lavorazione sfavorevoli

| VNGA  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,6 | 9,525 | 4,76 | 3,81 |

Inserti - Tornitura (CBN)

| VN** Inserti negativi |  |  |  | BL (CBN) |  |  | BC (CBN) |  |  | BH (CBN) |  |  |
|-----------------------|--|--|--|----------|--|--|----------|--|--|----------|--|--|
|                       |  |  |  | P        |  |  |          |  |  |          |  |  |
|                       |  |  |  | M        |  |  |          |  |  |          |  |  |
|                       |  |  |  | K        |  |  |          |  |  |          |  |  |
|                       |  |  |  | N        |  |  |          |  |  |          |  |  |
|                       |  |  |  | S        |  |  |          |  |  |          |  |  |
|                       |  |  |  | H        |  |  |          |  |  |          |  |  |

| ISO |                    |     |           | r         | a <sub>p</sub> | f | YCB112 | YCB113 | YCB121 | YCB131 | YCB113C | YCB121C | YCB131C | YCB215 |
|-----|--------------------|-----|-----------|-----------|----------------|---|--------|--------|--------|--------|---------|---------|---------|--------|
|     | VNGA160404S01020-2 | 0,4 | 0,08-0,50 | 0,05-0,20 |                |   |        |        |        |        |         |         |         |        |
|     | VNGA160404S01225-2 | 0,4 | 0,08-0,50 | 0,05-0,20 |                |   |        |        |        |        |         |         |         |        |
|     | VNGA160408S01020-2 | 0,8 | 0,08-0,50 | 0,05-0,25 |                |   |        |        |        |        |         |         |         |        |
|     | VNGA160408S01525-2 | 0,8 | 0,08-0,50 | 0,05-0,25 |                |   |        |        |        |        |         |         |         |        |
|     | VNGA160408S02020-2 | 0,8 | 0,08-0,50 | 0,05-0,25 |                |   |        |        |        |        |         |         |         |        |

● In magazzino ○ Su richiesta

BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

| Portautensile |         |            |         |
|---------------|---------|------------|---------|
| DVVNN         | DVJNR/L | MVVNN      | MVJNR/L |
| Kr: 72°30'    | Kr: 93° | Kr: 72°30' | Kr: 93° |
|               |         |            |         |
| A234          | A235    | A264       | A265    |

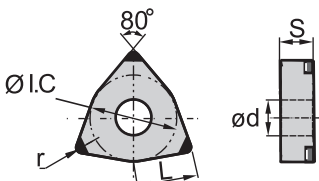




## Inserti - Tornitura (CBN)

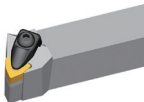
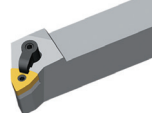
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| WNGA  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 08 04 | 8,69 | 12,7 | 4,76 | 5,16 |

| WN** Inserti negativi                                                             |                    |                |           | BL (CBN)  |        |        |        | BC (CBN) |         |         |  | BH (CBN) |  |  |  |
|-----------------------------------------------------------------------------------|--------------------|----------------|-----------|-----------|--------|--------|--------|----------|---------|---------|--|----------|--|--|--|
|  |                    |                |           | P         |        |        |        |          |         |         |  |          |  |  |  |
|                                                                                   |                    |                |           | M         |        |        |        |          |         |         |  |          |  |  |  |
|                                                                                   |                    |                |           | K         |        |        |        |          |         |         |  |          |  |  |  |
|                                                                                   |                    |                |           | N         |        |        |        |          |         |         |  |          |  |  |  |
|                                                                                   |                    |                |           | S         | ●      | ●      |        |          |         |         |  |          |  |  |  |
|                                                                                   |                    |                |           | H         | ○      | ●      | ●      | ○        | ●       | ●       |  |          |  |  |  |
| ISO                                                                               | r                  | a <sub>p</sub> | f         | YCB112    | YCB113 | YCB121 | YCB131 | YCB113C  | YCB121C | YCB131C |  | YCB215   |  |  |  |
|  | WNGA080404S01020-3 | 0,4            | 0,08-0,50 | 0,05-0,20 |        | ○      |        |          | ○       |         |  | ○        |  |  |  |
|                                                                                   | WNGA080404S01225-3 | 0,4            | 0,08-0,50 | 0,05-0,20 | ○      |        |        |          | ○       |         |  |          |  |  |  |
|                                                                                   | WNGA080408S01020-3 | 0,8            | 0,08-0,50 | 0,05-0,25 |        |        |        |          |         |         |  | ○        |  |  |  |
|                                                                                   | WNGA080408S01525-3 | 0,8            | 0,08-0,50 | 0,05-0,25 | ○      |        |        |          | ○       |         |  |          |  |  |  |
|                                                                                   | WNGA080408S02020-3 | 0,8            | 0,08-0,50 | 0,05-0,25 |        | ○      |        |          | ○       |         |  |          |  |  |  |
|                                                                                   | WNGA080412S01020-3 | 1,2            | 0,08-0,50 | 0,05-0,30 |        |        |        |          |         |         |  | ○        |  |  |  |
|                                                                                   | WNGA080412S01525-3 | 1,2            | 0,08-0,50 | 0,05-0,30 | ○      | ○      |        |          | ○       |         |  |          |  |  |  |
|                                                                                   | WNGA080412S02020-3 | 1,2            | 0,08-0,50 | 0,05-0,30 |        | ○      |        |          | ○       |         |  |          |  |  |  |

● In magazzino ○ Su richiesta

BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DWLNLR/L                                                                            | PWLNLR/L                                                                            | MWLNLR/L                                                                            | S***-PWLNLR/L                                                                       |
| Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             |
|  |  |  |  |
| A236                                                                                | A251                                                                                | A266                                                                                | A332                                                                                |

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| ZNEX  | I.C  | S    | d   |
|-------|------|------|-----|
| 04 01 | 4,76 | 1,59 | 2,3 |

Inserti - Tornitura (CBN)

| ZN** Inserti negativi |  |  |  | BL (CBN) |  |  | BC (CBN) |  |  | BH (CBN) |  |  |
|-----------------------|--|--|--|----------|--|--|----------|--|--|----------|--|--|
|                       |  |  |  | P        |  |  |          |  |  |          |  |  |
|                       |  |  |  | M        |  |  |          |  |  |          |  |  |
|                       |  |  |  | K        |  |  |          |  |  |          |  |  |
|                       |  |  |  | N        |  |  |          |  |  |          |  |  |
|                       |  |  |  | S        |  |  |          |  |  |          |  |  |
|                       |  |  |  | H        |  |  |          |  |  |          |  |  |

| ISO |                  |     |           | r         | a <sub>p</sub> | f | YCB112 | YCB113 | YCB121 | YCB131 | YCB113C | YCB121C | YCB131C | YCB215 |
|-----|------------------|-----|-----------|-----------|----------------|---|--------|--------|--------|--------|---------|---------|---------|--------|
|     | ZNEX040102S01515 | 0,2 | 0,08-0,50 | 0,05-0,15 |                |   | ○      | ○      |        |        |         |         |         |        |
|     | ZNEX040104S01515 | 0,4 | 0,08-0,50 | 0,05-0,20 |                |   | ○      | ○      |        |        |         |         |         |        |
|     |                  |     |           |           |                |   |        |        |        |        |         |         |         |        |
|     |                  |     |           |           |                |   |        |        |        |        |         |         |         |        |

● In magazzino ○ Su richiesta

BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

Portautensile

SZLNR/L

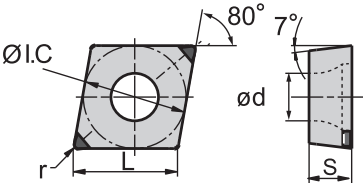
Kr: 95°

A365

## Inseriti - Tornitura (CBN)

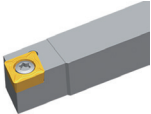
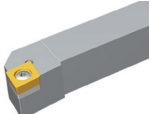
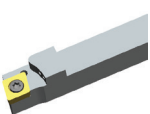
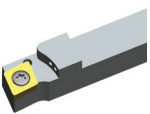
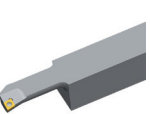
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CCGW  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 06 02 | 6,4  | 6,35  | 2,38 | 2,8 |
| 09 T3 | 9,7  | 9,525 | 3,97 | 4,4 |
| 12 04 | 12,9 | 12,7  | 4,76 | 5,5 |

| CC** Insetti positivi                                                               |                    |                |           |                    | BL (CBN) |                                                                                   |                                                                                   |                                                                                   | BC (CBN) |                                                                                   |                                                                                    | BH (CBN)                                                                            |   |  |  |  |  |
|-------------------------------------------------------------------------------------|--------------------|----------------|-----------|--------------------|----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---|--|--|--|--|
|    |                    |                |           |                    | P        |                                                                                   |                                                                                   |                                                                                   |          |                                                                                   |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     |                    |                |           |                    | M        |                                                                                   |                                                                                   |                                                                                   |          |                                                                                   |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     |                    |                |           |                    | K        |                                                                                   |                                                                                   |                                                                                   |          |                                                                                   |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     |                    |                |           |                    | N        |                                                                                   |                                                                                   |                                                                                   |          |                                                                                   |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     |                    |                |           |                    | S        |  |                                                                                   |  |          |                                                                                   |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     |                    |                |           |                    | H        |  |  |  |          |  |  |  |   |  |  |  |  |
| ISO                                                                                 | r                  | a <sub>p</sub> | f         | YCB112             | YCB113   | YCB121                                                                            | YCB131                                                                            | YCB113C                                                                           | YCB121C  | YCB131C                                                                           | YCB215                                                                             |                                                                                     |   |  |  |  |  |
|  | CCGW060202S01020-2 | 0,2            | 0,08-0,50 | 0,05-0,20          |          |                                                                                   | ○                                                                                 |                                                                                   |          | ○                                                                                 |                                                                                    | ○                                                                                   |   |  |  |  |  |
|                                                                                     | CCGW060202S01225-2 | 0,2            | 0,08-0,50 | 0,05-0,200,05-0,15 |          | ○                                                                                 |                                                                                   |                                                                                   |          | ○                                                                                 |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW060204S01020-2 | 0,4            | 0,08-0,50 | 0,05-0,20          |          |                                                                                   | ○                                                                                 |                                                                                   |          | ○                                                                                 |                                                                                    | ○                                                                                   |   |  |  |  |  |
|                                                                                     | CCGW060204S01225-2 | 0,4            | 0,08-0,50 | 0,05-0,20          |          | ○                                                                                 |                                                                                   |                                                                                   |          | ○                                                                                 |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW060208S01020-2 | 0,8            | 0,08-0,50 | 0,05-0,25          |          |                                                                                   |                                                                                   |                                                                                   |          |                                                                                   |                                                                                    | ○                                                                                   |   |  |  |  |  |
|                                                                                     | CCGW060208S01525-2 | 0,8            | 0,08-0,50 | 0,05-0,25          |          | ○                                                                                 |                                                                                   |                                                                                   |          | ○                                                                                 |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW060208S02020-2 | 0,8            | 0,08-0,50 | 0,05-0,25          |          |                                                                                   | ○                                                                                 |                                                                                   |          | ○                                                                                 |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW09T302S01020-2 | 0,2            | 0,08-0,50 | 0,05-0,15          |          |                                                                                   | ○                                                                                 |                                                                                   |          | ○                                                                                 |                                                                                    | ○                                                                                   |   |  |  |  |  |
|                                                                                     | CCGW09T302S01225-2 | 0,2            | 0,08-0,50 | 0,05-0,15          |          | ○                                                                                 |                                                                                   |                                                                                   |          | ○                                                                                 |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW09T304E-2      | 0,4            | 0,08-0,50 | 0,05-0,20          | ○        |                                                                                   |                                                                                   | ○                                                                                 |          |                                                                                   |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW09T304S01020-2 | 0,4            | 0,08-0,50 | 0,05-0,20          |          |                                                                                   | ●                                                                                 |                                                                                   |          | ○                                                                                 |                                                                                    | ○                                                                                   |   |  |  |  |  |
|                                                                                     | CCGW09T304S01225-2 | 0,4            | 0,08-0,50 | 0,05-0,20          |          | ●                                                                                 |                                                                                   |                                                                                   |          | ○                                                                                 |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW09T308E-2      | 0,8            | 0,08-0,50 | 0,05-0,25          | ○        |                                                                                   |                                                                                   | ○                                                                                 |          |                                                                                   |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW09T308S01020-2 | 0,8            | 0,08-0,50 | 0,05-0,25          |          |                                                                                   |                                                                                   |                                                                                   |          |                                                                                   |                                                                                    |                                                                                     | ● |  |  |  |  |
|                                                                                     | CCGW09T308S01525-2 | 0,8            | 0,08-0,50 | 0,05-0,25          |          | ●                                                                                 |                                                                                   | ○                                                                                 |          | ○                                                                                 |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW09T308S02020-2 | 0,8            | 0,08-0,50 | 0,05-0,25          |          |                                                                                   | ●                                                                                 |                                                                                   |          | ●                                                                                 |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW09T312E-2      | 1,2            | 0,08-0,50 | 0,05-0,30          | ○        |                                                                                   |                                                                                   | ○                                                                                 |          |                                                                                   |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW120404S01020-2 | 0,4            | 0,08-0,50 | 0,05-0,20          |          |                                                                                   | ○                                                                                 |                                                                                   |          | ○                                                                                 |                                                                                    | ○                                                                                   |   |  |  |  |  |
|                                                                                     | CCGW120404S01225-2 | 0,4            | 0,08-0,50 | 0,05-0,20          |          | ○                                                                                 |                                                                                   |                                                                                   |          | ○                                                                                 |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW120408S01020-2 | 0,8            | 0,08-0,50 | 0,05-0,25          |          |                                                                                   |                                                                                   |                                                                                   |          |                                                                                   |                                                                                    | ○                                                                                   |   |  |  |  |  |
|                                                                                     | CCGW120408S01525-2 | 0,8            | 0,08-0,50 | 0,05-0,25          |          | ○                                                                                 | ○                                                                                 |                                                                                   |          | ○                                                                                 |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW120408S02020-2 | 0,8            | 0,08-0,50 | 0,05-0,25          |          |                                                                                   | ○                                                                                 |                                                                                   |          | ○                                                                                 |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW120412S01020-2 | 1,2            | 0,08-0,50 | 0,05-0,30          |          |                                                                                   |                                                                                   |                                                                                   |          |                                                                                   |                                                                                    | ○                                                                                   |   |  |  |  |  |
|                                                                                     | CCGW120412S01525-2 | 1,2            | 0,08-0,50 | 0,05-0,30          |          | ○                                                                                 | ○                                                                                 |                                                                                   |          | ○                                                                                 |                                                                                    |                                                                                     |   |  |  |  |  |
|                                                                                     | CCGW120412S02020-2 | 1,2            | 0,08-0,50 | 0,05-0,30          |          |                                                                                   | ○                                                                                 |                                                                                   |          | ○                                                                                 |                                                                                    |                                                                                     |   |  |  |  |  |

**A**

Tornitura

| Portautensile                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SCACR/L                                                                           | SCLCR/L                                                                           | SCACR/L-SC                                                                        | SCLCR/L-SC                                                                        | A***-SCLCR/L                                                                       | S***-SCFCR/L                                                                        | S***-SCLCR                                                                          |
| Kr: 90°                                                                           | Kr: 95°                                                                           | Kr: 90°                                                                           | Kr: 95°                                                                           | Kr: 95°                                                                            | Kr: 90°                                                                             | Kr: 95°                                                                             |
|  |  |  |  |  |  |  |
| A269                                                                              | A270                                                                              | A306                                                                              | A307                                                                              | A334                                                                               | A352                                                                                | A353                                                                                |

E\*\*\*-SCLCR/L

Kr: 95°



A355

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**E**

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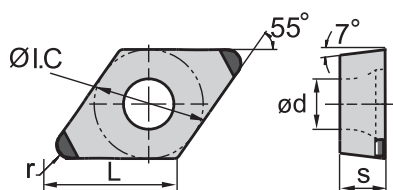
Scelta gradi > A42

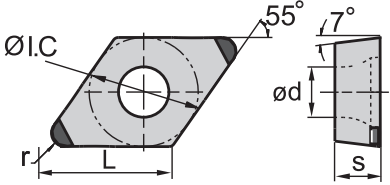
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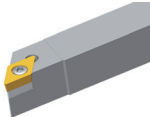
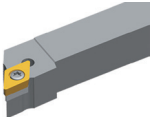
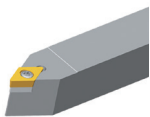
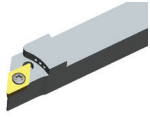
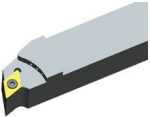
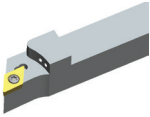
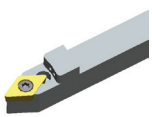
-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

|              |      |       |      |     |
|--------------|------|-------|------|-----|
| DCGW         | L    | I.C   | S    | d   |
| <b>07 02</b> | 7,8  | 6,35  | 2,38 | 2,8 |
| <b>11 T3</b> | 11,6 | 9,525 | 3,97 | 4,4 |

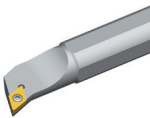
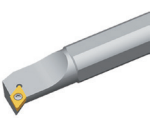
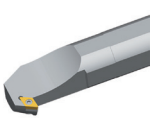


| DC** Inserti positivi                                                              |                    |                |           |                                      | BL (CBN)                      |                                                                                   | BC (CBN)                                                                          |                                                                                   | BH (CBN)                                                                          |                                                                                     |                                                                                     |
|------------------------------------------------------------------------------------|--------------------|----------------|-----------|--------------------------------------|-------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   |                    |                |           |                                      | P                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    |                    |                |           |                                      | M                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    |                    |                |           |                                      | K                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |  |
|                                                                                    |                    |                |           |                                      | N                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    |                    |                |           |                                      | S                             |  |  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    |                    |                |           |                                      | H                             |  |  |  |  |  |  |
| ISO                                                                                | r                  | a <sub>p</sub> | f         | YCB112<br>YCB113<br>YCB121<br>YCB131 | YCB113C<br>YCB121C<br>YCB131C | YCB215                                                                            |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|  | DCGW070202S01020-2 | 0,2            | 0,08-0,50 | 0,05-0,15                            | ●                             | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW070202S01225-2 | 0,2            | 0,08-0,50 | 0,05-0,15                            | ○                             | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW070204S01020-2 | 0,4            | 0,08-0,50 | 0,05-0,20                            | ●                             | ○                                                                                 | ○                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW070204S01225-2 | 0,4            | 0,08-0,50 | 0,05-0,20                            | ●                             | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW070208S01020-2 | 0,8            | 0,08-0,50 | 0,05-0,25                            |                               |                                                                                   | ○                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW070208S01525-2 | 0,8            | 0,08-0,50 | 0,05-0,25                            | ●                             | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW070208S02020-2 | 0,8            | 0,08-0,50 | 0,05-0,25                            | ●                             | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW11T302S01020-2 | 0,2            | 0,08-0,50 | 0,05-0,15                            | ○                             | ○                                                                                 | ○                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW11T302S01225-2 | 0,2            | 0,08-0,50 | 0,05-0,15                            | ○                             | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW11T304E-2      | 0,4            | 0,08-0,50 | 0,05-0,20                            | ○                             | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW11T304S01020-2 | 0,4            | 0,08-0,50 | 0,05-0,20                            | ●                             | ○                                                                                 | ●                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW11T304S01225-2 | 0,4            | 0,08-0,50 | 0,05-0,20                            | ●                             | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW11T308E-2      | 0,8            | 0,08-0,50 | 0,05-0,25                            | ○                             | ○                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW11T308S01020-2 | 0,8            | 0,08-0,50 | 0,05-0,25                            |                               |                                                                                   | ●                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW11T308S01525-2 | 0,8            | 0,08-0,50 | 0,05-0,25                            | ●                             | ○                                                                                 | ●                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                    | DCGW11T308S02020-2 | 0,8            | 0,08-0,50 | 0,05-0,25                            |                               | ●                                                                                 | ●                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| DCGW11T312E-2                                                                      | 1,2                | 0,08-0,50      | 0,05-0,30 | ○                                    | ○                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |

BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>SDACR/L</b><br>Kr: 90°                                                           | <b>SDJCR/L</b><br>Kr: 93°                                                           | <b>SDNCN</b><br>Kr: 62°30'                                                          | <b>SDACR/L-SC</b><br>Kr: 90°                                                        | <b>SDHCR/L-SC</b><br>Kr: 107°30'                                                     | <b>SDJCR/L-SC</b><br>Kr: 93°                                                          | <b>SDNCN-SC</b><br>Kr: 62°30'                                                         |
|  |  |  |  |  |  |  |
| A271                                                                                | A272                                                                                | A273                                                                                | A308                                                                                | A309                                                                                 | A310                                                                                  | A311                                                                                  |

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>S***-SDQCR/L</b><br>Kr: 107°30'                                                  | <b>A***-SDUCR/L</b><br>Kr: 93°                                                      | <b>S***-SDZCR/L</b><br>Kr: 85°                                                      | <b>E***-SDQCR/L</b><br>Kr: 107°30'                                                  |
|  |  |  |  |
| A336                                                                                | A337                                                                                | A338                                                                                | A357                                                                                |

A

Tornitura

## Inserti - Tornitura (CBN)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TCGW  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 02 | 11   | 6,35  | 2,38 | 2,5 |
| 16 T3 | 16,5 | 9,525 | 3,97 | 4,4 |

| TC** Inserti positivi |  |  |  | BL (CBN) |  |  | BC (CBN) |  |  | BH (CBN) |  |  |
|-----------------------|--|--|--|----------|--|--|----------|--|--|----------|--|--|
|                       |  |  |  | P        |  |  |          |  |  |          |  |  |
|                       |  |  |  | M        |  |  |          |  |  |          |  |  |
|                       |  |  |  | K        |  |  |          |  |  |          |  |  |
|                       |  |  |  | N        |  |  |          |  |  |          |  |  |
|                       |  |  |  | S        |  |  |          |  |  |          |  |  |
|                       |  |  |  | H        |  |  |          |  |  |          |  |  |

B

Fresatura

| ISO                | r   | a <sub>p</sub> | f         | YCB112 | YCB113 | YCB121 | YCB131 | YCB113C | YCB121C | YCB131C | YCB215 |
|--------------------|-----|----------------|-----------|--------|--------|--------|--------|---------|---------|---------|--------|
| TCGW110204S01020-3 | 0,4 | 0,08-0,50      | 0,05-0,20 |        |        |        |        |         |         |         |        |
| TCGW110204S01225-3 | 0,4 | 0,08-0,50      | 0,05-0,20 |        |        |        |        |         |         |         |        |
| TCGW110208S01020-3 | 0,8 | 0,08-0,50      | 0,05-0,25 |        |        |        |        |         |         |         |        |
| TCGW110208S01525-3 | 0,8 | 0,08-0,50      | 0,05-0,25 |        |        |        |        |         |         |         |        |
| TCGW110208S02020-3 | 0,8 | 0,08-0,50      | 0,05-0,25 |        |        |        |        |         |         |         |        |
| TCGW16T304S01020-3 | 0,4 | 0,08-0,50      | 0,05-0,20 |        |        |        |        |         |         |         |        |
| TCGW16T304S01225-3 | 0,4 | 0,08-0,50      | 0,05-0,20 |        |        |        |        |         |         |         |        |
| TCGW16T308S01020-3 | 0,8 | 0,08-0,50      | 0,05-0,25 |        |        |        |        |         |         |         |        |
| TCGW16T308S01525-3 | 0,8 | 0,08-0,50      | 0,05-0,25 |        |        |        |        |         |         |         |        |
| TCGW16T308S02020-3 | 0,8 | 0,08-0,50      | 0,05-0,25 |        |        |        |        |         |         |         |        |

● In magazzino ○ Su richiesta

BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

C

Foratura

| Portautensile |         |         |         |              |              |
|---------------|---------|---------|---------|--------------|--------------|
| STACR/L       | STFCR/L | STGCR/L | STTCR/L | S***-STFCR/L | E***-STFCR/L |
| Kr: 90°       | Kr: 91° | Kr: 91° | Kr: 60° | Kr: 91°      | Kr: 90°      |
|               |         |         |         |              |              |
| A283          | A284    | A285    | A286    | A341         | A361         |

D

Informazioni tecniche

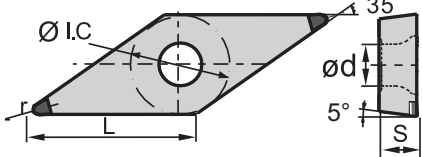
E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

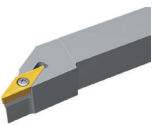
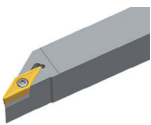
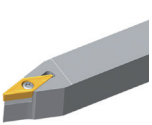
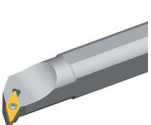
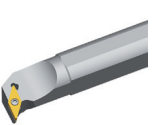
| VBGW  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 16 04 | 16,6 | 9,525 | 4,76 | 4,4 |

## Inseriti - Tornitura (CBN)

| VB** Inserti positivi                                                             |                    |  |  | BL (CBN) |                |           |        | BC (CBN) |        |        | BH (CBN) |         |         |        |
|-----------------------------------------------------------------------------------|--------------------|--|--|----------|----------------|-----------|--------|----------|--------|--------|----------|---------|---------|--------|
|  |                    |  |  | P        |                |           |        |          |        |        |          |         |         |        |
|                                                                                   |                    |  |  | M        |                |           |        |          |        |        |          |         |         |        |
|                                                                                   |                    |  |  | K        |                |           |        |          |        |        |          |         |         |        |
|                                                                                   |                    |  |  | N        |                |           |        |          |        |        |          |         |         |        |
|                                                                                   |                    |  |  | S        | ●              | ●         | ●      |          |        |        |          |         |         |        |
|                                                                                   |                    |  |  | H        | ○              | ○         | ○      | ○        | ○      | ○      |          |         |         |        |
| ISO                                                                               |                    |  |  | r        | a <sub>p</sub> | f         | YCB112 | YCB113   | YCB121 | YCB131 | YCB113C  | YCB121C | YCB131C | YCB215 |
|  | VBGW160404S01020-2 |  |  | 0,4      | 0,08-0,50      | 0,05-0,20 |        | ●        |        |        |          | ○       |         | ○      |
|                                                                                   | VBGW160404S01225-2 |  |  | 0,4      | 0,08-0,50      | 0,05-0,20 | ●      |          |        |        | ○        |         |         |        |
|                                                                                   | VBGW160408S01020-2 |  |  | 0,8      | 0,08-0,50      | 0,05-0,25 |        |          |        |        |          |         |         | ○      |
|                                                                                   | VBGW160408S01525-2 |  |  | 0,8      | 0,08-0,50      | 0,05-0,25 | ●      |          |        |        | ○        |         |         |        |
|                                                                                   | VBGW160408S02020-2 |  |  | 0,8      | 0,08-0,50      | 0,05-0,25 |        | ●        |        |        | ○        |         |         |        |

● In magazzino ○ Su richiesta

BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SVJBR/L                                                                             | SVABR/L                                                                             | SVVBN                                                                               | S***-SVQBR/L                                                                        | S***-SVUBR/L                                                                         | S***-SVXBR/L                                                                          |
| Kr: 93°                                                                             | Kr: 90°                                                                             | Kr: 72°30'                                                                          | Kr: 107°30'                                                                         | Kr: 93°                                                                              | Kr: 93°                                                                               |
|  |  |  |  |  |  |
| A274                                                                                | A275                                                                                | A276                                                                                | A345                                                                                | A346                                                                                 | A347                                                                                  |

A

Tornitura

## Inserti - Tornitura (CBN)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VCGW  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 03 | 11,1 | 6,35  | 3,18 | 2,8 |
| 16 04 | 16,6 | 9,525 | 4,76 | 4,4 |

| VC** Inserti positivi |  |  |  | BL (CBN) | BC (CBN) | BH (CBN) |
|-----------------------|--|--|--|----------|----------|----------|
|                       |  |  |  | P        |          |          |
|                       |  |  |  | M        |          |          |
|                       |  |  |  | K        |          |          |
|                       |  |  |  | N        |          |          |
|                       |  |  |  | S        | ●        | ●        |
|                       |  |  |  | H        | ○        | ○        |

B

Fresatura

| ISO                | r   | a <sub>p</sub> | f         | YCB112 | YCB113 | YCB121 | YCB131 | YCB113C | YCB121C | YCB131C | YCB215 |
|--------------------|-----|----------------|-----------|--------|--------|--------|--------|---------|---------|---------|--------|
| VCGW110302E-2      | 0,2 | 0,08-0,50      | 0,05-0,15 | ○      |        | ○      |        |         |         |         |        |
| VCGW110304E-2      | 0,4 | 0,08-0,50      | 0,05-0,20 | ○      |        | ○      |        |         |         |         |        |
| VCGW160404E-2      | 0,4 | 0,08-0,50      | 0,05-0,20 | ○      |        | ○      |        |         |         |         |        |
| VCGW160404S01020-2 | 0,4 | 0,08-0,50      | 0,05-0,20 |        | ●      |        |        | ○       |         |         | ○      |
| VCGW160404S01225-2 | 0,4 | 0,08-0,50      | 0,05-0,20 |        | ●      |        |        | ○       |         |         |        |
| VCGW160408E-2      | 0,8 | 0,08-0,50      | 0,05-0,25 | ○      |        | ○      |        |         |         |         |        |
| VCGW160408S01020-2 | 0,8 | 0,08-0,50      | 0,05-0,25 |        |        |        |        |         |         |         | ○      |
| VCGW160408S01525-2 | 0,8 | 0,08-0,50      | 0,05-0,25 |        | ●      |        |        | ○       |         |         |        |
| VCGW160408S02020-2 | 0,8 | 0,08-0,50      | 0,05-0,25 |        | ●      |        |        | ○       |         |         |        |
| VCGW160412E-2      | 1,2 | 0,08-0,50      | 0,05-0,30 | ○      |        | ○      |        |         |         |         |        |

● In magazzino ○ Su richiesta

BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

C

Foratura

| Portautensile |         |            |            |              |              |              |
|---------------|---------|------------|------------|--------------|--------------|--------------|
| SVVCN         | SVJCR/L | SVACR/L-SC | SVJCR/L-SC | S***-SVQCR/L | S***-SVUCR/L | C***-SVQCR/L |
| Kr: 72°30'    | Kr: 93° | Kr: 90°    | Kr: 93°    | Kr: 107°30'  | Kr: 93°      | Kr: 107°30'  |
|               |         |            |            |              |              |              |
| A277          | A278    | A312       | A313       | A343         | A344         | A363         |

D

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| C***-SVUCR/L |
|--------------|
| Kr: 93°      |
|              |
| A364         |

E

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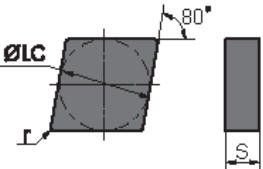
Dati di taglio > A366



## Inseriti - Tornitura (CBN)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CNGN  | L    | I.C   | S    |
|-------|------|-------|------|
| 09 03 | 9,7  | 9,525 | 3,18 |
| 12 04 | 12,9 | 12,7  | 4,76 |

| CN** Inserti negativi                                                               |                    |  |  | BL (CBN) |                | BC (CBN) |        | BH (CBN) |        |
|-------------------------------------------------------------------------------------|--------------------|--|--|----------|----------------|----------|--------|----------|--------|
|    |                    |  |  | P        |                |          |        |          |        |
|                                                                                     |                    |  |  | M        |                |          |        |          |        |
|                                                                                     |                    |  |  | K        |                |          |        | ●        |        |
|                                                                                     |                    |  |  | N        |                |          |        |          |        |
|                                                                                     |                    |  |  | S        |                |          |        |          |        |
|                                                                                     |                    |  |  | H        | ●              |          | ●      |          |        |
| ISO                                                                                 |                    |  |  | r        | a <sub>p</sub> | f        | YZB630 | YZB630C  | YZB223 |
|    | CNGN090308S01525   |  |  | 0,8      | 0,5-2,0        | 0,3-0,5  | ○      | ○        |        |
|                                                                                     | CNGN090308T01525   |  |  | 0,8      | 0,5-2,0        | 0,3-0,5  |        |          | ○      |
|                                                                                     | CNGN090312S01525   |  |  | 1,2      | 0,5-2,0        | 0,3-0,5  | ○      | ○        |        |
|                                                                                     | CNGN090312T01525   |  |  | 1,2      | 0,5-2,0        | 0,3-0,5  |        |          | ○      |
|                                                                                     | CNGN120408S01525   |  |  | 0,8      | 0,5-2,0        | 0,3-0,5  | ○      | ○        |        |
|                                                                                     | CNGN120408T01525   |  |  | 0,8      | 0,5-2,0        | 0,3-0,5  |        |          | ●      |
|                                                                                     | CNGN120412S01525   |  |  | 1,2      | 0,5-2,0        | 0,3-0,5  | ●      | ○        |        |
|                                                                                     | CNGN120412T01525   |  |  | 1,2      | 0,5-2,0        | 0,3-0,5  |        |          | ●      |
|  | CNGN120416S01525   |  |  | 1,6      | 0,5-2,0        | 0,3-0,5  | ○      | ○        |        |
|                                                                                     | CNGN120408T01525-M |  |  | 0,8      | 0,5-2,0        | 0,3-0,5  |        |          | ○      |
|                                                                                     | CNGN120412T01525-M |  |  | 1,2      | 0,5-2,0        | 0,3-0,5  |        |          | ○      |
|                                                                                     | CNGN120416T01525-M |  |  | 1,6      | 0,5-2,0        | 0,3-0,5  |        |          | ○      |

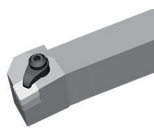
● In magazzino ○ Su richiesta

BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

Portautensile

CCLNR/L

Kr: 95°



A292

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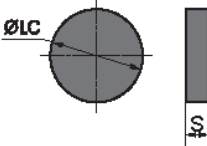
E

Indice

-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

| RNGN  | I.C   | S    |
|-------|-------|------|
| 09 03 | 9,525 | 3,18 |
| 12 04 | 12,7  | 4,76 |

## Inserti - Tornitura (CBN)

| RN** Inserti negativi                                                             |   |                                                                                   | BL (CBN) | BC (CBN)                                                                            | BH (CBN)                                                                            |
|-----------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | P |                                                                                   |          |                                                                                     |                                                                                     |
|                                                                                   | M |                                                                                   |          |                                                                                     |                                                                                     |
|                                                                                   | K |                                                                                   |          |                                                                                     |  |
|                                                                                   | N |                                                                                   |          |                                                                                     |                                                                                     |
|                                                                                   | S |                                                                                   |          |                                                                                     |                                                                                     |
|                                                                                   | H |  |          |  |                                                                                     |

| ISO                                                                               | a <sub>p</sub>   | f       | YZB630  | YZB630C                                                                             | YZB223                                                                              |
|-----------------------------------------------------------------------------------|------------------|---------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | RNGN090300S01525 | 0,5-2,0 | 0,3-0,5 |    |                                                                                     |
|                                                                                   | RNGN090300T01525 | 0,5-2,0 | 0,3-0,5 |                                                                                     |  |
|                                                                                   | RNGN120400S01525 | 0,5-2,0 | 0,3-0,5 |  |                                                                                     |
|                                                                                   | RNGN120400T01525 | 0,5-2,0 | 0,3-0,5 |                                                                                     |  |

● In magazzino ○ Su richiesta

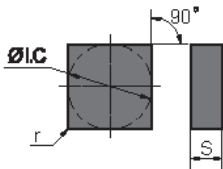
BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

|                                                                                     |
|-------------------------------------------------------------------------------------|
| Portautensile                                                                       |
| CRDNN                                                                               |
|  |
| A298                                                                                |

## Inseriti - Tornitura (CBN)

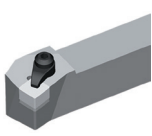
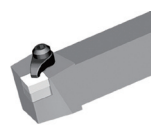
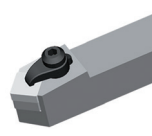
-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

| SNGN  | L    | I.C  | S    |
|-------|------|------|------|
| 12 04 | 12,7 | 12,7 | 4,76 |

| SN** Inserti negativi                                                             |                    |                |         | BL (CBN) | BC (CBN)                                                                          | BH (CBN)                                                                            |
|-----------------------------------------------------------------------------------|--------------------|----------------|---------|----------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |                    |                |         | P        |                                                                                   |                                                                                     |
|                                                                                   |                    |                |         | M        |                                                                                   |                                                                                     |
|                                                                                   |                    |                |         | K        |                                                                                   |  |
|                                                                                   |                    |                |         | N        |                                                                                   |                                                                                     |
|                                                                                   |                    |                |         | S        |                                                                                   |                                                                                     |
|                                                                                   |                    |                |         | H        |  |    |
| ISO                                                                               | r                  | a <sub>p</sub> | f       | YZB630   | YZB630C                                                                           | YZB223                                                                              |
|  | SNGN120408S01525   | 0,8            | 0,5-2,0 | 0,3-0,5  | ○                                                                                 | ○                                                                                   |
|                                                                                   | SNGN120408T01525   | 0,8            | 0,5-2,0 | 0,3-0,5  |                                                                                   | ●                                                                                   |
|                                                                                   | SNGN120412S01525   | 1,2            | 0,5-2,0 | 0,3-0,5  | ○                                                                                 | ○                                                                                   |
|                                                                                   | SNGN120412T01525   | 1,2            | 0,5-2,0 | 0,3-0,5  |                                                                                   | ○                                                                                   |
|                                                                                   | SNGN120416T01525   | 1,6            | 0,5-2,0 | 0,3-0,5  |                                                                                   | ●                                                                                   |
|  | SNGN120412T01525-M | 1,2            | 0,5-2,0 | 0,3-0,5  |                                                                                   | ○                                                                                   |
|                                                                                   | SNGN120416T01525-M | 1,6            | 0,5-2,0 | 0,3-0,5  |                                                                                   | ●                                                                                   |
|                                                                                   |                    |                |         |          |                                                                                   |                                                                                     |

● In magazzino ○ Su richiesta

BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN

| Portautensile                                                                       |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| CSKNR/L                                                                             | CSNRN/L                                                                             | CSDNN                                                                               |
| Kr: 75°                                                                             | Kr: 75°                                                                             | Kr: 45°                                                                             |
|  |  |  |
| A296                                                                                | A297                                                                                | A299                                                                                |

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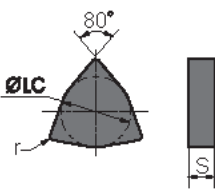
E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| WNGN  | L    | I.C  | S    |
|-------|------|------|------|
| 08 04 | 8,69 | 12,7 | 4,76 |

Inserti - Tornitura (CBN)

| WN** Inserti negativi                                                             |                    |     |         | BL (CBN) |                |   | BC (CBN) |  |         | BH (CBN) |        |  |
|-----------------------------------------------------------------------------------|--------------------|-----|---------|----------|----------------|---|----------|--|---------|----------|--------|--|
|  |                    |     |         | P        |                |   |          |  |         |          |        |  |
|                                                                                   |                    |     |         | M        |                |   |          |  |         |          |        |  |
|                                                                                   |                    |     |         | K        |                |   |          |  |         |          |        |  |
|                                                                                   |                    |     |         | N        |                |   |          |  |         |          |        |  |
|                                                                                   |                    |     |         | S        |                |   |          |  |         |          |        |  |
|                                                                                   |                    |     |         | H        |                |   |          |  |         |          |        |  |
| ISO                                                                               |                    |     |         | r        | a <sub>p</sub> | f | YZB630   |  | YZB630C |          | YZB223 |  |
|  | WNGN080408T01525   | 0,8 | 0,5-2,0 | 0,3-0,5  |                |   |          |  |         |          |        |  |
|                                                                                   | WNGN080412T01525   | 1,2 | 0,5-2,0 | 0,3-0,5  |                |   |          |  |         |          |        |  |
|                                                                                   | WNGN080416T01525   | 1,6 | 0,5-2,0 | 0,3-0,5  |                |   |          |  |         |          |        |  |
|                                                                                   |                    |     |         |          |                |   |          |  |         |          |        |  |
|  | WNGN080408T01525-M | 0,8 | 0,5-2,0 | 0,3-0,5  |                |   |          |  |         |          |        |  |
|                                                                                   | WNGN080412T01525-M | 1,2 | 0,5-2,0 | 0,3-0,5  |                |   |          |  |         |          |        |  |
|                                                                                   | WNGN080416T01525-M | 1,6 | 0,5-2,0 | 0,3-0,5  |                |   |          |  |         |          |        |  |
|                                                                                   |                    |     |         |          |                |   |          |  |         |          |        |  |

● In magazzino ○ Su richiesta

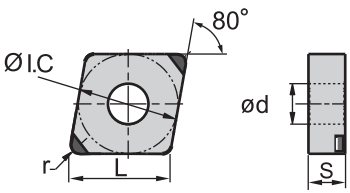
BL CBN con ridotto contenuto di CBN  
BC CBN rivestito  
BH CBN con elevato contenuto di CBN



## Inserti - Tornitura (PCD)

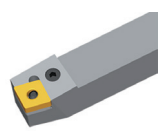
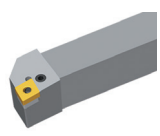
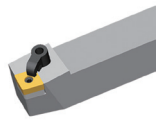
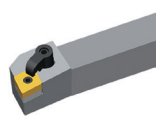
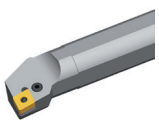
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CNGA  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 12 04 | 12,9 | 12,7 | 4,76 | 5,16 |

| CN** Inserti negativi                                                             |               |                |           | DP        |   |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|---------------|----------------|-----------|-----------|---|--|--|--|--|--|--|--|--|--|--|
|  |               |                |           | P         |   |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | M         |   |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | K         |   |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | N         | ● |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | S         |   |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | H         |   |  |  |  |  |  |  |  |  |  |  |
| ISO                                                                               | r             | a <sub>p</sub> | f         | YCD421    |   |  |  |  |  |  |  |  |  |  |  |
|  | CNGA120402F-1 | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | CNGA120404F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | CNGA120408F-1 | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | CNGA120412F-1 | 1,2            | 0,08-0,50 | 0,05-0,30 | ○ |  |  |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DCLNR/L                                                                             | PCBNR/L                                                                             | PCLNR/L                                                                             | MCBNR/L                                                                             | MCLNR/L                                                                              | S***-PCLNR/L                                                                          |
| Kr: 95°                                                                             | Kr: 75°                                                                             | Kr: 95°                                                                             | Kr: 75°                                                                             | Kr: 95°                                                                              | Kr: 95°                                                                               |
|  |  |  |  |  |  |
| A230                                                                                | A237                                                                                | A238                                                                                | A252                                                                                | A253                                                                                 | A324                                                                                  |

Codice sistema > A158

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366

A

Tornitura

## Inserti - Tornitura (PCD)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DNGA  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 15 06 | 15,5 | 12,7 | 6,35 | 5,16 |

| DN** Inserti negativi |               |                |           |           | DP |  |  |  |  |  |  |  |  |  |
|-----------------------|---------------|----------------|-----------|-----------|----|--|--|--|--|--|--|--|--|--|
|                       |               |                |           |           | P  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           |           | M  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           |           | K  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           |           | N  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           |           | S  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           |           | H  |  |  |  |  |  |  |  |  |  |
| ISO                   | r             | a <sub>p</sub> | f         | YCD421    |    |  |  |  |  |  |  |  |  |  |
|                       | DNGA150602F-1 | 0,2            | 0,08-0,50 | 0,05-0,15 |    |  |  |  |  |  |  |  |  |  |
|                       | DNGA150604F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 |    |  |  |  |  |  |  |  |  |  |
|                       | DNGA150608F-1 | 0,8            | 0,08-0,50 | 0,05-0,25 |    |  |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

B

Fresatura

C

Foratura

| Portautensile |         |         |         |            |              |              |
|---------------|---------|---------|---------|------------|--------------|--------------|
| DDJNR/L       | PDJNR/L | PDNNR/L | MDJNR/L | MDPNN      | S***-PDSNR/L | S***-PDUNR/L |
| Kr: 93°       | Kr: 93° | Kr: 63° | Kr: 93° | Kr: 62°30' | Kr: 62°30'   | Kr: 93°      |
|               |         |         |         |            |              |              |
| A231          | A240    | A241    | A254    | A255       | A326         | A327         |

D

Informazioni tecniche

E

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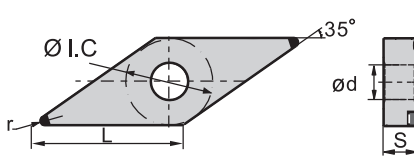
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura (PCD)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VNGA  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,6 | 9,525 | 4,76 | 3,81 |

| VN** Inserti negativi                                                             |               |                |           | DP        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|---------------|----------------|-----------|-----------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |               |                |           | P         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | M         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | K         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | N         | ● |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | S         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | H         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ISO                                                                               | r             | a <sub>p</sub> | f         | YCD421    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | VNGA160402F-1 | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | VNGA160404F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           |           |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           |           |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DVVNN                                                                               | DVJNR/L                                                                             | MVVNN                                                                               | MVJNR/L                                                                             |
| Kr: 72°30'                                                                          | Kr: 93°                                                                             | Kr: 72°30'                                                                          | Kr: 93°                                                                             |
|  |  |  |  |
| A234                                                                                | A235                                                                                | A264                                                                                | A265                                                                                |

A

Tornitura

B

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C

Foratura

D

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E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura (PCD)

| CCGT  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 06 02 | 6,4  | 6,35  | 2,38 | 2,8  |
| 09 T3 | 9,7  | 9,525 | 3,97 | 4,4  |
| 12 04 | 12,9 | 12,7  | 4,76 | 5,56 |

| CC** Inserti positivi |                  |                |           | DP        |   |  |  |  |  |  |  |  |  |  |  |
|-----------------------|------------------|----------------|-----------|-----------|---|--|--|--|--|--|--|--|--|--|--|
|                       |                  |                |           | P         |   |  |  |  |  |  |  |  |  |  |  |
|                       |                  |                |           | M         |   |  |  |  |  |  |  |  |  |  |  |
|                       |                  |                |           | K         |   |  |  |  |  |  |  |  |  |  |  |
|                       |                  |                |           | N         | ○ |  |  |  |  |  |  |  |  |  |  |
|                       |                  |                |           | S         |   |  |  |  |  |  |  |  |  |  |  |
|                       |                  |                |           | H         |   |  |  |  |  |  |  |  |  |  |  |
| ISO                   | r                | a <sub>p</sub> | f         | YCD421    |   |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT060202F-1    | 0,2            | 0,05-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT060204F-1    | 0,4            | 0,08-0,50 | 0,05-0,20 | ● |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT060208F-1    | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT09T302F-1    | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT09T304F-1    | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT09T308F-1    | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT120402F-1    | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT120404F-1    | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT120408F-1    | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT060204F-1MED | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT060208F-1MED | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT09T302F-1MED | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT09T304F-1MED | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGT09T308F-1MED | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

| Portautensile |         |            |            |              |              |            |
|---------------|---------|------------|------------|--------------|--------------|------------|
| SCACR/L       | SCLCR/L | SCACR/L-SC | SCLCR/L-SC | A***-SCLCR/L | S***-SCFCR/L | S***-SCLCR |
| Kr: 90°       | Kr: 95° | Kr: 90°    | Kr: 95°    | Kr: 95°      | Kr: 90°      | Kr: 95°    |
|               |         |            |            |              |              |            |
| A269          | A270    | A306       | A307       | A334         | A352         | A353       |
| E***-SCLCR/L  |         |            |            |              |              |            |
| Kr: 95°       |         |            |            |              |              |            |

|      |
|------|
|      |
| A355 |

Codice sistema > A158

Scelta gradi > A42

Informazioni tecniche > A501

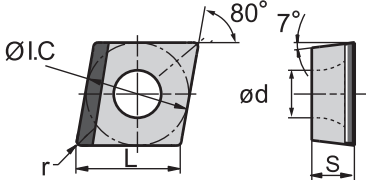
Dati di taglio > A366



## Inserti - Tornitura (PCD)

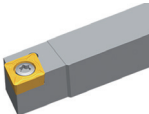
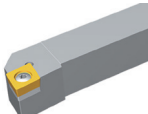
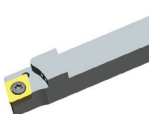
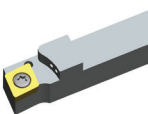
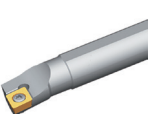
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CCGT  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 09 T3 | 9,7  | 9,525 | 3,97 | 4,4  |
| 12 04 | 12,9 | 12,7  | 4,76 | 5,56 |

| CC** Inserti positivi                                                             |               |                |           | DP        |   |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|---------------|----------------|-----------|-----------|---|--|--|--|--|--|--|--|--|
|  |               |                |           | P         |   |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | M         |   |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | K         |   |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | N         | ● |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | S         |   |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | H         |   |  |  |  |  |  |  |  |  |
| ISO                                                                               | r             | a <sub>p</sub> | f         | YCD421    |   |  |  |  |  |  |  |  |  |
|  | CCGT09T308-LL | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |
|                                                                                   | CCGT09T308-LR | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |
|                                                                                   | CCGT120404-LL | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |
|                                                                                   | CCGT120404-LR | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |
|                                                                                   | CCGT120408-LL | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |
|                                                                                   | CCGT120408-LR | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SCACR/L                                                                             | SCLCR/L                                                                             | SCACR/L-SC                                                                          | SCLCR/L-SC                                                                          | A***-SCLCR/L                                                                         | S***-SCFCR/L                                                                          | S***-SCLCR                                                                            |
| Kr: 90°                                                                             | Kr: 95°                                                                             | Kr: 90°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                              | Kr: 90°                                                                               | Kr: 95°                                                                               |
|  |  |  |  |  |  |  |
| A269                                                                                | A270                                                                                | A306                                                                                | A307                                                                                | A334                                                                                 | A352                                                                                  | A353                                                                                  |
| E***-SCLCR/L                                                                        |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| Kr: 95°                                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A355                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura (PCD)

| CCGW  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 06 02 | 6,4  | 6,35  | 2,38 | 2,8  |
| 09 T3 | 9,7  | 9,525 | 3,97 | 4,4  |
| 12 04 | 12,9 | 12,7  | 4,76 | 5,56 |

| CC** Inserti positivi |               |                |           | DP        |   |  |  |  |  |  |  |  |  |  |  |
|-----------------------|---------------|----------------|-----------|-----------|---|--|--|--|--|--|--|--|--|--|--|
|                       |               |                |           | P         |   |  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           | M         |   |  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           | K         |   |  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           | N         | ○ |  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           | S         |   |  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           | H         |   |  |  |  |  |  |  |  |  |  |  |
| ISO                   | r             | a <sub>p</sub> | f         | YCD421    |   |  |  |  |  |  |  |  |  |  |  |
|                       | CCGW060202F-1 | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGW060204F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |
|                       | CCGW09T304F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 | ● |  |  |  |  |  |  |  |  |  |  |
|                       | CCGW09T308F-1 | 0,8            | 0,08-0,50 | 0,05-0,25 | ● |  |  |  |  |  |  |  |  |  |  |
|                       | CCGW120404F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 | ● |  |  |  |  |  |  |  |  |  |  |
|                       | CCGW120408F-1 | 0,8            | 0,08-0,50 | 0,05-0,25 | ● |  |  |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

| Portautensile |         |            |            |              |              |            |
|---------------|---------|------------|------------|--------------|--------------|------------|
| SCACR/L       | SCLCR/L | SCACR/L-SC | SCLCR/L-SC | A***-SCLCR/L | S***-SCFCR/L | S***-SCLCR |
| Kr: 90°       | Kr: 95° | Kr: 90°    | Kr: 95°    | Kr: 95°      | Kr: 90°      | Kr: 95°    |
|               |         |            |            |              |              |            |
| A269          | A270    | A306       | A307       | A334         | A352         | A353       |

| E***-SCLCR/L |
|--------------|
| Kr: 95°      |
|              |
| A355         |

Codice sistema > A158

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura (PCD)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CCGW  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 06 02 | 6,4  | 6,35  | 2,38 | 2,8  |
| 09 T3 | 9,7  | 9,525 | 3,97 | 4,4  |
| 12 04 | 12,9 | 12,7  | 4,76 | 5,56 |

| CC** Inserti positivi |               |                |           | DP        |   |  |  |  |  |  |  |  |  |
|-----------------------|---------------|----------------|-----------|-----------|---|--|--|--|--|--|--|--|--|
|                       |               |                |           | P         |   |  |  |  |  |  |  |  |  |
|                       |               |                |           | M         |   |  |  |  |  |  |  |  |  |
|                       |               |                |           | K         |   |  |  |  |  |  |  |  |  |
|                       |               |                |           | N         | ● |  |  |  |  |  |  |  |  |
|                       |               |                |           | S         |   |  |  |  |  |  |  |  |  |
|                       |               |                |           | H         |   |  |  |  |  |  |  |  |  |
| ISO                   | r             | a <sub>p</sub> | f         | YCD421    |   |  |  |  |  |  |  |  |  |
|                       | CCGW060204-LL | 0,2            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |
|                       | CCGW060204-LR | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |
|                       | CCGW09T304-LL | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |
|                       | CCGW09T304-LR | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |
|                       | CCGW09T308-LL | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |
|                       | CCGW09T308-LR | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |
|                       | CCGW120404-LL | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |
|                       | CCGW120404-LR | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |
|                       | CCGW120408-LL | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |
|                       | CCGW120408-LR | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

| Portautensile |         |            |            |              |              |            |
|---------------|---------|------------|------------|--------------|--------------|------------|
| SCACR/L       | SCLCR/L | SCACR/L-SC | SCLCR/L-SC | A***-SCLCR/L | S***-SCFCR/L | S***-SCLCR |
| Kr: 90°       | Kr: 95° | Kr: 90°    | Kr: 95°    | Kr: 95°      | Kr: 90°      | Kr: 95°    |
|               |         |            |            |              |              |            |
| A269          | A270    | A306       | A307       | A334         | A352         | A353       |

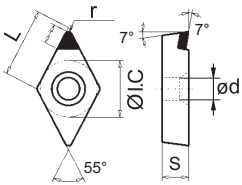
| E***-SCLCR/L |
|--------------|
| Kr: 95°      |
|              |
| A355         |



## Inseriti - Tornitura (PCD)

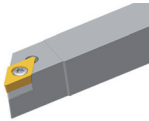
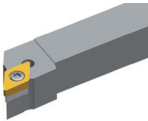
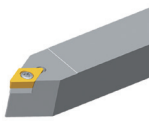
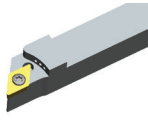
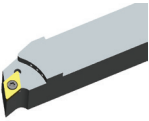
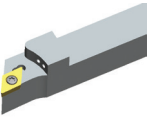
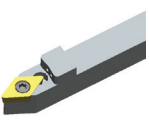
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DCGT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 07 02 | 7,8  | 6,35  | 2,38 | 2,8 |
| 11 T3 | 11,6 | 9,525 | 3,97 | 4,4 |

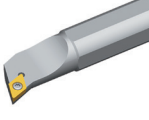
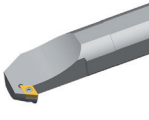
| DC** Inseriti positivi                                                            |                  |                |           | DP        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|------------------|----------------|-----------|-----------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |                  |                |           | P         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |                  |                |           | M         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |                  |                |           | K         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |                  |                |           | N         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |                  |                |           | S         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |                  |                |           | H         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ISO                                                                               | r                | a <sub>p</sub> | f         | YCD421    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | DCGT070202F-1MED | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | DCGT070204F-1MED | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | DCGT070208F-1MED | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | DCGT11T302F-1MED | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | DCGT11T304F-1MED | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | DCGT11T308F-1MED | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SDACR/L                                                                             | SDJCR/L                                                                             | SDNCN                                                                               | SDACR/L-SC                                                                          | SDHCR/L-SC                                                                           | SDJCR/L-SC                                                                            | SDNCN-SC                                                                              |
| Kr: 90°                                                                             | Kr: 93°                                                                             | Kr: 62°30'                                                                          | Kr: 90°                                                                             | Kr: 107°30'                                                                          | Kr: 93°                                                                               | Kr: 62°30'                                                                            |
|  |  |  |  |  |  |  |
| A271                                                                                | A272                                                                                | A273                                                                                | A308                                                                                | A309                                                                                 | A310                                                                                  | A311                                                                                  |

| S***-SDQCR/L                                                                        | A***-SDUCR/L                                                                        | S***-SDZCR/L                                                                        | E***-SDQCR/L                                                                        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Kr: 107°30'                                                                         | Kr: 93°                                                                             | Kr: 85°                                                                             | Kr: 107°30'                                                                         |
|  |  |  |  |
| A336                                                                                | A337                                                                                | A338                                                                                | A357                                                                                |

Codice sistema &gt; A158

Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

Dati di taglio &gt; A366

A

Tornitura

## Inserti - Tornitura (PCD)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DCGW  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 07 02 | 7,8  | 6,35  | 2,38 | 2,8 |
| 11 T3 | 11,6 | 9,525 | 3,97 | 4,4 |

| DC** Inserti positivi |               |                |           |           | DP |  |  |  |  |  |  |  |  |  |
|-----------------------|---------------|----------------|-----------|-----------|----|--|--|--|--|--|--|--|--|--|
|                       |               |                |           |           | P  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           |           | M  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           |           | K  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           |           | N  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           |           | S  |  |  |  |  |  |  |  |  |  |
|                       |               |                |           |           | H  |  |  |  |  |  |  |  |  |  |
| ISO                   | r             | a <sub>p</sub> | f         | YCD421    |    |  |  |  |  |  |  |  |  |  |
|                       | DCGW070202F-1 | 0,2            | 0,08-0,50 | 0,05-0,15 | ●  |  |  |  |  |  |  |  |  |  |
|                       | DCGW070204F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 | ●  |  |  |  |  |  |  |  |  |  |
|                       | DCGW070208F-1 | 0,8            | 0,08-0,50 | 0,05-0,25 | ○  |  |  |  |  |  |  |  |  |  |
|                       | DCGW11T302F-1 | 0,2            | 0,08-0,50 | 0,05-0,15 | ●  |  |  |  |  |  |  |  |  |  |
|                       | DCGW11T304F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 | ●  |  |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

B

Fresatura

C

Foratura

| Portautensile |         |            |            |             |            |            |
|---------------|---------|------------|------------|-------------|------------|------------|
| SDACR/L       | SDJCR/L | SDNCN      | SDACR/L-SC | SDHCR/L-SC  | SDJCR/L-SC | SDNCN-SC   |
| Kr: 90°       | Kr: 93° | Kr: 62°30' | Kr: 90°    | Kr: 107°30' | Kr: 93°    | Kr: 62°30' |
|               |         |            |            |             |            |            |
| A271          | A272    | A273       | A308       | A309        | A310       | A311       |

| S***-SDQCR/L | A***-SDUCR/L | S***-SDZCR/L | E***-SDQCR/L |
|--------------|--------------|--------------|--------------|
| Kr: 107°30'  | Kr: 93°      | Kr: 85°      | Kr: 107°30'  |
|              |              |              |              |
| A336         | A337         | A338         | A357         |

D

Informazioni tecniche

E

Indice

Codice sistema > A158

Scelta gradi > A42

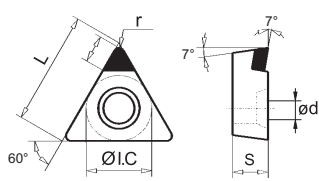
Informazioni tecniche > A501

Dati di taglio > A366

## Inseriti - Tornitura (PCD)

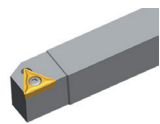
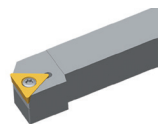
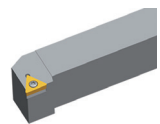
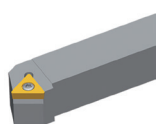
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TCGT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 02 | 11   | 6,35  | 2,38 | 2,8 |
| 16 T3 | 16,5 | 9,525 | 3,97 | 4,4 |

| TC** Inseriti positivi                                                             |                  |                |           | DP        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------|------------------|----------------|-----------|-----------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|   |                  |                |           | P         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    |                  |                |           | M         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    |                  |                |           | K         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    |                  |                |           | N         | ● |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    |                  |                |           | S         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    |                  |                |           | H         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ISO                                                                                | r                | a <sub>p</sub> | f         | YCD421    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   | TCGT110202F-1    | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    | TCGT110204F-1    | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    | TCGT110208F-1    | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    | TCGT16T302F-1    | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    | TCGT16T304F-1    | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    | TCGT16T308F-1    | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | TCGT110202F-1MED | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    | TCGT110204F-1MED | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    | TCGT110208F-1MED | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    | TCGT16T302F-1MED | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    | TCGT16T304F-1MED | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                    | TCGT16T308F-1MED | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| STACR/L                                                                             | STFCR/L                                                                             | STGCR/L                                                                             | STTCR/L                                                                             | S***-STFCR/L                                                                         | E***-STFCR/L                                                                          |
| Kr: 90°                                                                             | Kr: 91°                                                                             | Kr: 91°                                                                             | Kr: 60°                                                                             | Kr: 91°                                                                              | Kr: 90°                                                                               |
|  |  |  |  |  |  |
| A283                                                                                | A284                                                                                | A285                                                                                | A286                                                                                | A341                                                                                 | A361                                                                                  |

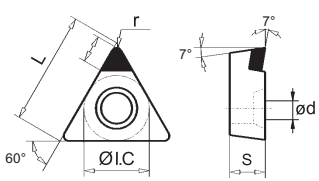
A

Tornitura

## Inserti - Tornitura (PCD)

-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

| TCGT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 02 | 11   | 6,35  | 2,38 | 2,8 |
| 16 T3 | 16,5 | 9,525 | 3,97 | 4,4 |

| TC** Inserti positivi                                                             |  |  |  | DP |                                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|--|--|--|----|-----------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  | P  |                                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |  |  |  | M  |                                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |  |  |  | K  |                                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |  |  |  | N  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |  |  |  | S  |                                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |  |  |  | H  |                                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

B

Fresatura

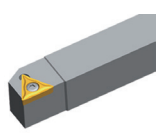
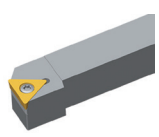
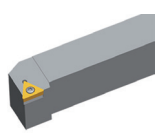
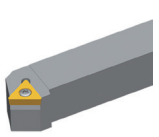
| ISO                                                                               |              | r   | a <sub>p</sub> | f         | YCD421                                                                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|--------------|-----|----------------|-----------|-----------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  | TCGT110202-L | 0,2 | 0,08-0,50      | 0,05-0,15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | TCGT110204-L | 0,4 | 0,08-0,50      | 0,05-0,20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | TCGT110208-L | 0,8 | 0,08-0,50      | 0,05-0,25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | TCGT16T302-L | 0,2 | 0,08-0,50      | 0,05-0,15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | TCGT16T304-L | 0,4 | 0,08-0,50      | 0,05-0,20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | TCGT16T308-L | 0,8 | 0,08-0,50      | 0,05-0,25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

C

Foratura

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| STACR/L                                                                             | STFCR/L                                                                             | STGCR/L                                                                             | STTCR/L                                                                             | S***-STFCR/L                                                                         | E***-STFCR/L                                                                          |
| Kr: 90°                                                                             | Kr: 91°                                                                             | Kr: 91°                                                                             | Kr: 60°                                                                             | Kr: 91°                                                                              | Kr: 90°                                                                               |
|  |  |  |  |  |  |
| A283                                                                                | A284                                                                                | A285                                                                                | A286                                                                                | A341                                                                                 | A361                                                                                  |

D

Informazioni tecniche

E

Indice

Codice sistema > A158

Scelta gradi > A42

Informazioni tecniche > A501

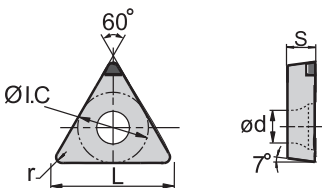
Dati di taglio > A366



## Inserti - Tornitura (PCD)

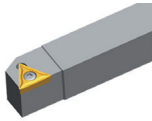
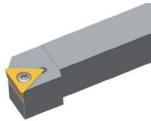
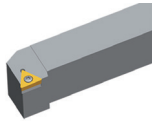
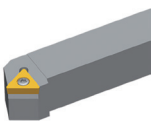
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TCGW  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 02 | 11   | 6,35  | 2,38 | 2,8 |
| 16 T3 | 16,5 | 9,525 | 3,97 | 4,4 |

| TC** Inserti positivi                                                             |               |                |           | DP        |   |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|---------------|----------------|-----------|-----------|---|--|--|--|--|--|--|--|--|
|  |               |                |           | P         |   |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | M         |   |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | K         |   |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | N         | ● |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | S         |   |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | H         |   |  |  |  |  |  |  |  |  |
| ISO                                                                               | r             | a <sub>p</sub> | f         | YCD421    |   |  |  |  |  |  |  |  |  |
|  | TCGW110202F-1 | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |
|                                                                                   | TCGW110204F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 | ● |  |  |  |  |  |  |  |  |
|                                                                                   | TCGW110208F-1 | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |
|                                                                                   | TCGW16T304F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 | ● |  |  |  |  |  |  |  |  |
|                                                                                   | TCGW16T308F-1 | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |
|                                                                                   | TCGW16T312F-1 | 1,2            | 0,08-0,50 | 0,05-0,30 | ○ |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| STACR/L                                                                             | STFCR/L                                                                             | STGCR/L                                                                             | STTCR/L                                                                             | S***-STFCR/L                                                                         | E***-STFCR/L                                                                          |
| Kr: 90°                                                                             | Kr: 91°                                                                             | Kr: 91°                                                                             | Kr: 60°                                                                             | Kr: 91°                                                                              | Kr: 90°                                                                               |
|  |  |  |  |  |  |
| A283                                                                                | A284                                                                                | A285                                                                                | A286                                                                                | A341                                                                                 | A361                                                                                  |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

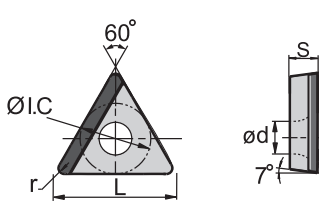
E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TCGW  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 02 | 11   | 6,35  | 2,38 | 2,8 |
| 16 T3 | 16,5 | 9,525 | 3,97 | 4,4 |

Inserti - Tornitura (PCD)

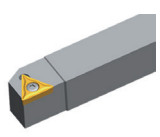
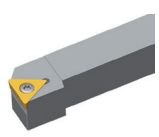
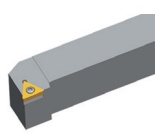
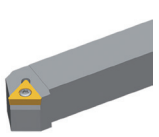
| TC** Inserti positivi                                                             |  |  |  | DP |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|--|--|--|----|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  | P  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |  |  |  | M  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |  |  |  | K  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |  |  |  | N  | ● |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |  |  |  | S  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |  |  |  | H  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| ISO                                                                               |              | r   | a <sub>p</sub> | f         | YCD421 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|--------------|-----|----------------|-----------|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  | TCGW110202-L | 0,2 | 0,08-0,50      | 0,05-0,15 | ○      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | TCGW110204-L | 0,4 | 0,08-0,50      | 0,05-0,20 | ○      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | TCGW110208-L | 0,8 | 0,08-0,50      | 0,05-0,25 | ○      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | TCGW16T302-L | 0,2 | 0,08-0,50      | 0,05-0,15 | ○      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | TCGW16T304-L | 0,4 | 0,08-0,50      | 0,05-0,20 | ○      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | TCGW16T308-L | 0,8 | 0,08-0,50      | 0,05-0,25 | ○      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta DP Diamante policristallino

C

Foratura

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| STACR/L                                                                             | STFCR/L                                                                             | STGCR/L                                                                             | STTCR/L                                                                             | S***-STFCR/L                                                                         | E***-STFCR/L                                                                          |
| Kr: 90°                                                                             | Kr: 91°                                                                             | Kr: 91°                                                                             | Kr: 60°                                                                             | Kr: 91°                                                                              | Kr: 90°                                                                               |
|  |  |  |  |  |  |
| A283                                                                                | A284                                                                                | A285                                                                                | A286                                                                                | A341                                                                                 | A361                                                                                  |

D

Informazioni tecniche

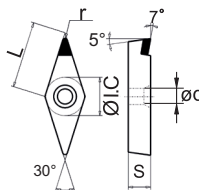
E

Indice

## Inseriti - Tornitura (PCD)

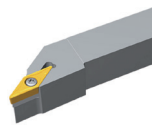
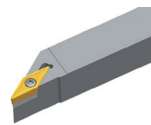
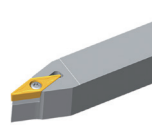
-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

| VBGT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 03 | 11   | 6,35  | 3,18 | 2,8 |
| 16 04 | 16,6 | 9,525 | 4,76 | 4,4 |

| VB** Inserti positivi                                                              |                  |                |           | DP        |                                                                                   |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------|------------------|----------------|-----------|-----------|-----------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|
|   |                  |                |           | P         |                                                                                   |  |  |  |  |  |  |  |  |
|                                                                                    |                  |                |           | M         |                                                                                   |  |  |  |  |  |  |  |  |
|                                                                                    |                  |                |           | K         |                                                                                   |  |  |  |  |  |  |  |  |
|                                                                                    |                  |                |           | N         |  |  |  |  |  |  |  |  |  |
|                                                                                    |                  |                |           | S         |                                                                                   |  |  |  |  |  |  |  |  |
|                                                                                    |                  |                |           | H         |                                                                                   |  |  |  |  |  |  |  |  |
| ISO                                                                                | r                | a <sub>p</sub> | f         | YCD421    |                                                                                   |  |  |  |  |  |  |  |  |
|   | VBGT110302F-1    | 0,2            | 0,08-0,50 | 0,05-0,15 |  |  |  |  |  |  |  |  |  |
|                                                                                    | VBGT110304F-1    | 0,4            | 0,08-0,50 | 0,05-0,20 |  |  |  |  |  |  |  |  |  |
|                                                                                    | VBGT110308F-1    | 0,8            | 0,08-0,50 | 0,05-0,25 |  |  |  |  |  |  |  |  |  |
|                                                                                    | VBGT160402F-1    | 0,2            | 0,08-0,50 | 0,05-0,15 |  |  |  |  |  |  |  |  |  |
|                                                                                    | VBGT160404F-1    | 0,4            | 0,08-0,50 | 0,05-0,20 |  |  |  |  |  |  |  |  |  |
|                                                                                    | VBGT160408F-1    | 0,8            | 0,08-0,50 | 0,05-0,25 |  |  |  |  |  |  |  |  |  |
|  | VBGT160404F-1MED | 0,4            | 0,08-0,50 | 0,05-0,20 |  |  |  |  |  |  |  |  |  |
|                                                                                    | VBGT160408F-1MED | 0,8            | 0,08-0,50 | 0,05-0,25 |  |  |  |  |  |  |  |  |  |
|                                                                                    |                  |                |           |           |                                                                                   |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

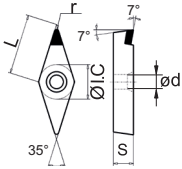
| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SVJBR/L                                                                             | SVABR/L                                                                             | SVVBN                                                                               | S***-SVQBR/L                                                                        | S***-SVUBR/L                                                                         | S***-SVXBR/L                                                                          |
| Kr: 93°                                                                             | Kr: 90°                                                                             | Kr: 72°30'                                                                          | Kr: 107°30'                                                                         | Kr: 93°                                                                              | Kr: 93°                                                                               |
|  |  |  |  |  |  |
| A274                                                                                | A275                                                                                | A276                                                                                | A345                                                                                | A346                                                                                 | A347                                                                                  |



## Inseriti - Tornitura (PCD)

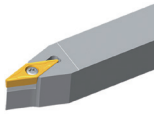
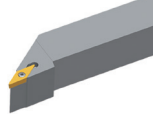
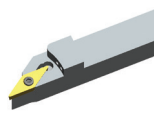
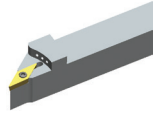
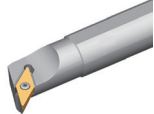
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VCGT  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 02 | 11   | 6,35  | 2,38 | 2,8 |
| 16 04 | 16,6 | 9,525 | 4,76 | 4,4 |

| VC** Inseriti positivi                                                            |               |                |           | DP        |   |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|---------------|----------------|-----------|-----------|---|--|--|--|--|--|--|--|--|
|  |               |                |           | P         |   |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | M         |   |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | K         |   |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | N         | ● |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | S         |   |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | H         |   |  |  |  |  |  |  |  |  |
| ISO                                                                               | r             | a <sub>p</sub> | f         | YCD421    |   |  |  |  |  |  |  |  |  |
|  | VCGT110202F-1 | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |
|                                                                                   | VCGT110204F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |
|                                                                                   | VCGT160402F-1 | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |
|                                                                                   | VCGT160404F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |
|                                                                                   | VCGT160408F-1 | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SVVCN                                                                               | SVJCR/L                                                                             | SVACR/L-SC                                                                          | SVJCR/L-SC                                                                          | S***-SVQCR/L                                                                         | S***-SVUCR/L                                                                          | C***-SVQCR/L                                                                          |
| Kr: 72°30'                                                                          | Kr: 93°                                                                             | Kr: 90°                                                                             | Kr: 93°                                                                             | Kr: 107°30'                                                                          | Kr: 93°                                                                               | Kr: 107°30'                                                                           |
|  |  |  |  |  |  |  |
| A277                                                                                | A278                                                                                | A312                                                                                | A313                                                                                | A343                                                                                 | A344                                                                                  | A363                                                                                  |

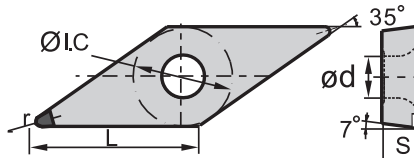
| C***-SVUCR/L                                                                        |
|-------------------------------------------------------------------------------------|
| Kr: 93°                                                                             |
|  |
| A364                                                                                |



## Inserti - Tornitura (PCD)

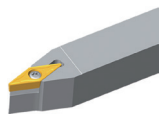
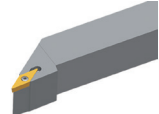
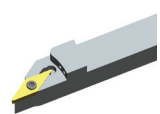
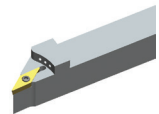
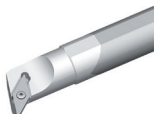
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VCGW  | L    | I.C   | S    | d   |
|-------|------|-------|------|-----|
| 11 03 | 11   | 6,35  | 3,18 | 2,8 |
| 16 04 | 16,6 | 9,525 | 4,76 | 4,4 |

| VC** Inserti positivi                                                             |               |                |           | DP        |   |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|---------------|----------------|-----------|-----------|---|--|--|--|--|--|--|--|--|--|--|
|  |               |                |           | P         |   |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | M         |   |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | K         |   |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | N         | ● |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | S         |   |  |  |  |  |  |  |  |  |  |  |
|                                                                                   |               |                |           | H         |   |  |  |  |  |  |  |  |  |  |  |
| ISO                                                                               | r             | a <sub>p</sub> | f         | YCD421    |   |  |  |  |  |  |  |  |  |  |  |
|  | VCGW110302F-1 | 0,2            | 0,08-0,50 | 0,05-0,15 | ○ |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | VCGW110304F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | VCGW160404F-1 | 0,4            | 0,08-0,50 | 0,05-0,20 | ○ |  |  |  |  |  |  |  |  |  |  |
|                                                                                   | VCGW160408F-1 | 0,8            | 0,08-0,50 | 0,05-0,25 | ○ |  |  |  |  |  |  |  |  |  |  |

● In magazzino ○ Su richiesta

DP Diamante policristallino

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SVVCN                                                                               | SVJCR/L                                                                             | SVACR/L-SC                                                                          | SVJCR/L-SC                                                                          | S***-SVQCR/L                                                                         | S***-SVUCR/L                                                                          | C***-SVQCR/L                                                                          |
| Kr: 72°30'                                                                          | Kr: 93°                                                                             | Kr: 90°                                                                             | Kr: 93°                                                                             | Kr: 107°30'                                                                          | Kr: 93°                                                                               | Kr: 107°30'                                                                           |
|  |  |  |  |  |  |  |
| A277                                                                                | A278                                                                                | A312                                                                                | A313                                                                                | A343                                                                                 | A344                                                                                  | A363                                                                                  |

| C***-SVUCR/L                                                                        |
|-------------------------------------------------------------------------------------|
| Kr: 93°                                                                             |
|  |
| A364                                                                                |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

E

Indice

Codice sistema > A158

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

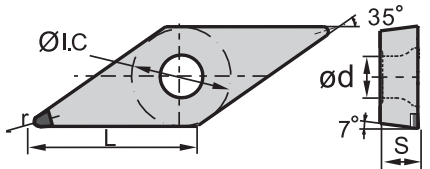
E

Indice

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VCGX  | L  | I.C  | S    | d   |
|-------|----|------|------|-----|
| 22 05 | 22 | 12,7 | 5,56 | 5,5 |

Inserti - Tornitura (PCD)

| VC** Inserti positivi                                                             |   | DP |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|---|----|--|--|--|--|--|--|--|--|--|
|  | P |    |  |  |  |  |  |  |  |  |  |
|                                                                                   | M |    |  |  |  |  |  |  |  |  |  |
|                                                                                   | K |    |  |  |  |  |  |  |  |  |  |
|                                                                                   | N | ●  |  |  |  |  |  |  |  |  |  |
|                                                                                   | S |    |  |  |  |  |  |  |  |  |  |
|                                                                                   | H |    |  |  |  |  |  |  |  |  |  |

| ISO                                                                               |              | r | a <sub>p</sub> | f         | YCD421 |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|--------------|---|----------------|-----------|--------|--|--|--|--|--|--|
|  | VCGX220530-1 | 3 | 0,5-7,0        | 0,25-1,00 | ○      |  |  |  |  |  |  |
|                                                                                   |              |   |                |           |        |  |  |  |  |  |  |
|                                                                                   |              |   |                |           |        |  |  |  |  |  |  |
|                                                                                   |              |   |                |           |        |  |  |  |  |  |  |
|                                                                                   |              |   |                |           |        |  |  |  |  |  |  |

● In magazzino ○ Su richiesta DP Diamante policristallino





[illegible]

## Tornitura

## Fresatura

## Foratura

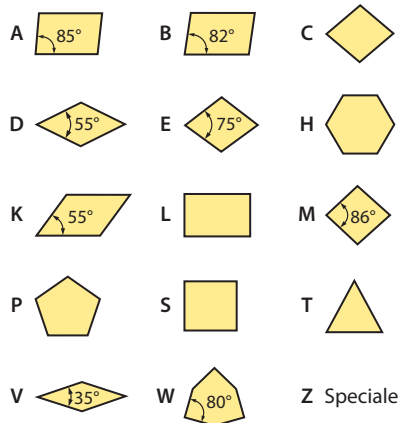
Informazioni  
tecniche

## Indice

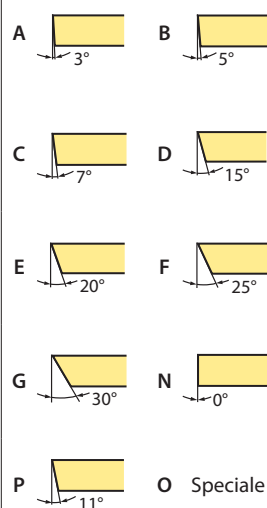
**T N G A 12 04 08 T 020 20**

**1 2 3 4 5 6 7 8 9 10**

Forma dell'inserto



Angolo di spoglia inferiore



Grado di tolleranza

| Code | I.C [mm]   | m [mm]     | S [mm] |
|------|------------|------------|--------|
| A    | ±0,025     | ±0,005     | ±0,025 |
| C    | ±0,025     | ±0,013     | ±0,025 |
| E    | ±0,025     | ±0,025     | ±0,025 |
| F    | ±0,013     | ±0,005     | ±0,025 |
| G    | ±0,025     | ±0,025     | ±0,130 |
| H    | ±0,013     | ±0,013     | ±0,025 |
| J    | ±0,05-0,15 | ±0,005     | ±0,025 |
| K    | ±0,05-0,15 | ±0,013     | ±0,025 |
| L    | ±0,05-0,15 | ±0,025     | ±0,025 |
| M    | ±0,05-0,15 | ±0,08-0,20 | ±0,130 |
| N    | ±0,05-0,15 | ±0,08-0,20 | ±0,025 |
| U    | ±0,08-0,25 | ±0,13-0,38 | ±0,130 |

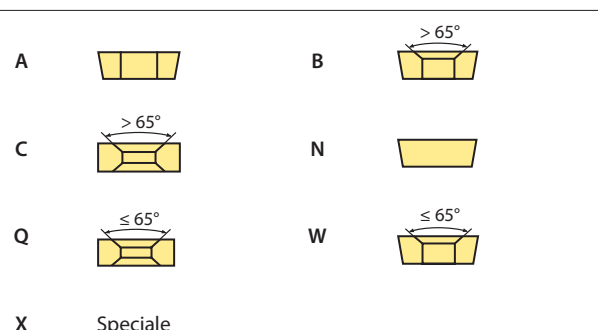
**1**

**2**

**3**

Caratteristiche di fissaggio (metrico)

Forma dell'inserto

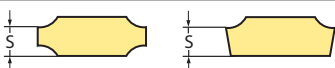


**4**

Lunghezza tagliente [mm]

| I.C [mm] | Forma dell'inserto |    |    |    |    |    |
|----------|--------------------|----|----|----|----|----|
|          | C                  | D  | S  | T  | V  | W  |
| 3,97     |                    |    |    |    |    |    |
| 5,0      |                    |    |    |    |    |    |
| 5,56     |                    |    |    |    |    |    |
| 6,0      |                    |    |    |    |    |    |
| 6,35     | 06                 | 07 |    | 11 | 11 |    |
| 8,0      |                    |    |    |    |    |    |
| 9,525    | 09                 | 11 | 09 | 16 | 16 | 06 |
| 10,0     |                    |    |    |    |    |    |
| 12,0     |                    |    |    |    |    |    |
| 12,7     | 12                 | 15 | 12 | 22 | 22 | 08 |
| 15,875   | 16                 |    | 15 | 27 |    |    |
| 16,0     |                    | 19 |    |    |    |    |
| 19,05    | 19                 |    | 19 | 33 |    |    |
| 20,0     |                    |    |    |    |    |    |
| 25,0     | 25                 | 25 |    |    |    |    |
| 25,4     |                    |    | 25 |    |    |    |
| 31,75    |                    |    |    |    |    |    |
| 32       |                    |    |    |    |    |    |

**5**

| Spessore dell'inserto S [mm]                                                      |      |      |       |
|-----------------------------------------------------------------------------------|------|------|-------|
|  |      |      |       |
| Code                                                                              | S    | Code | S     |
| 02                                                                                | 2,38 | 06   | 6,35  |
| T2                                                                                | 2,58 | T6   | 6,75  |
| 03                                                                                | 3,18 | 07   | 7,94  |
| T3                                                                                | 3,97 | 09   | 9,52  |
| 04                                                                                | 4,76 | T9   | 9,72  |
| T4                                                                                | 4,96 | 11   | 11,11 |
| 05                                                                                | 5,56 | 12   | 12,70 |
| T5                                                                                | 5,95 |      |       |
|                                                                                   |      |      |       |
|                                                                                   |      |      |       |

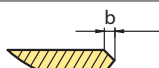
**6**

| Raggio di punta r [mm]                                                              |               |
|-------------------------------------------------------------------------------------|---------------|
|  |               |
| Code                                                                                | r             |
| 00                                                                                  | –             |
| 02                                                                                  | 0,2           |
| 04                                                                                  | 0,4           |
| 08                                                                                  | 0,8           |
| 12                                                                                  | 1,2           |
| 16                                                                                  | 1,6           |
| 20                                                                                  | 2,0           |
| 24                                                                                  | 2,4           |
| 32                                                                                  | 3,2           |
| X                                                                                   | Speciale      |
| MO                                                                                  | Inserti tondi |

**7**

| Versione del tagliente |                         |                                                                                     |
|------------------------|-------------------------|-------------------------------------------------------------------------------------|
| Code                   | Tagliente               | Forma dell'inserto                                                                  |
| E                      | Arrotondato             |    |
| F                      | Spigolo vivo            |  |
| T                      | Smusso                  |  |
| S                      | Smusso + Arrotondamento |  |

**8**

| Larghezza smusso b [mm]                                                             |      |
|-------------------------------------------------------------------------------------|------|
|  |      |
| Code                                                                                | b    |
| 010                                                                                 | 0,10 |
| 015                                                                                 | 0,15 |
| 020                                                                                 | 0,20 |
| 025                                                                                 | 0,25 |
| 030                                                                                 | 0,30 |
| 035                                                                                 | 0,35 |
| 040                                                                                 | 0,40 |
| 045                                                                                 | 0,45 |
| 050                                                                                 | 0,50 |
| 100                                                                                 | 1,00 |
| 200                                                                                 | 2,00 |

**9**

| Angolo dello smusso α                                                               |     |
|-------------------------------------------------------------------------------------|-----|
|  |     |
| Code                                                                                | α   |
| 05                                                                                  | 5°  |
| 10                                                                                  | 10° |
| 15                                                                                  | 15° |
| 20                                                                                  | 20° |
| 25                                                                                  | 25° |
| 30                                                                                  | 30° |

**10**

A

Tornitura

## Inserti - Tornitura (Ceramici)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CNGA  | L    | I.C    | S    | d    |
|-------|------|--------|------|------|
| 12 04 | 12,9 | 12,7   | 4,76 | 5,16 |
| 16 06 | 16,1 | 15,875 | 6,35 | 6,35 |

| CN** Inserti negativi |     |                |           | CM     | CC     | CN               | CR               |
|-----------------------|-----|----------------|-----------|--------|--------|------------------|------------------|
|                       | P   | ●              |           |        |        |                  |                  |
|                       | M   |                |           |        |        |                  |                  |
|                       | K   | ●              |           |        |        | ●                |                  |
|                       | N   |                |           |        |        |                  |                  |
|                       | S   |                |           |        |        | ●                | ●                |
|                       | H   |                |           | ○      |        |                  |                  |
| ISO                   | r   | a <sub>p</sub> | f         | CA1000 | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
| CNGA120404S02020      | 0,4 | 0,1-0,3        | 0,08-0,25 |        | ●      |                  |                  |
| CNGA120404T01020      | 0,4 | 0,1-0,3        | 0,08-0,25 |        | ○      |                  |                  |
| CNGA120404T02020      | 0,4 | 0,1-0,3        | 0,08-0,25 | ○      | ●      | ●                |                  |
| CNGA120408S01520      | 0,8 | 0,1-0,25       | 0,5-2,5   |        |        |                  | ○                |
| CNGA120408S02020      | 0,8 | 0,1-0,4        | 0,1-0,3   |        | ●      |                  |                  |
| CNGA120408T00520      | 0,8 | 0,1-0,25       | 0,5-2,5   |        |        |                  | ○ ●              |
| CNGA120408T01020      | 0,8 | 0,1-0,4        | 0,1-0,3   |        | ○      |                  |                  |
| CNGA120408T02020      | 0,8 | 0,1-0,4        | 0,1-0,3   | ○      | ●      | ○                |                  |
| CNGA120412S01520      | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        |                  | ○                |
| CNGA120412S02020      | 1,2 | 0,1-0,5        | 0,1-0,3   |        | ●      |                  |                  |
| CNGA120412T00520      | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        |                  | ○                |
| CNGA120412T02020      | 1,2 | 0,1-0,5        | 0,1-0,3   | ○      | ○      | ●                |                  |
| CNGA120416S01520      | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○                |
| CNGA120416T00520      | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○ ○              |
| CNGA160612T02020      | 1,2 | 0,2-2,0        | 0,1-0,3   |        |        | ●                |                  |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si<sub>3</sub>N<sub>4</sub>  
CR Al<sub>2</sub>O<sub>3</sub> ceramica, rinforzata

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| Portautensile |         |         |         |         |              |
|---------------|---------|---------|---------|---------|--------------|
| DCLNR/L       | PCBNR/L | PCLNR/L | MCBNR/L | MCLNR/L | S***-PCLNR/L |
| Kr: 95°       | Kr: 75° | Kr: 95° | Kr: 75° | Kr: 95° | Kr: 95°      |
|               |         |         |         |         |              |
| A230          | A237    | A238    | A252    | A253    | A324         |

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## Inserti - Tornitura (Ceramici)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CNGN  | L    | I.C    | S    |
|-------|------|--------|------|
| 12 04 | 12,9 | 12,7   | 4,76 |
| 12 07 | 12,9 | 12,7   | 7,94 |
| 16 07 | 16,1 | 15,875 | 7,94 |
| 16 06 | 16,1 | 15,875 | 6,35 |

| CN** Inserti negativi |     |                |           | CM     | CC     | CN               | CR               |
|-----------------------|-----|----------------|-----------|--------|--------|------------------|------------------|
|                       |     |                |           | P      |        |                  |                  |
|                       |     |                |           | M      |        |                  |                  |
|                       |     |                |           | K      |        |                  |                  |
|                       |     |                |           | N      |        |                  |                  |
|                       |     |                |           | S      |        |                  |                  |
|                       |     |                |           | H      |        |                  |                  |
| ISO                   | r   | a <sub>p</sub> | f         | CA1000 | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
| CNGN120404T00520      | 0,4 | 0,1-0,25       | 0,5-2,0   |        |        |                  | ○                |
| CNGN120404T02020      | 0,4 | 0,1-0,3        | 0,08-0,25 | ○      |        |                  |                  |
| CNGN120408S01520      | 0,8 | 0,1-0,25       | 0,5-2,5   |        |        |                  | ○                |
| CNGN120408S02020      | 0,8 | 0,1-0,4        | 0,1-0,3   |        | ○      |                  |                  |
| CNGN120408T00520      | 0,8 | 0,1-0,25       | 0,5-2,5   |        |        |                  | ●                |
| CNGN120408T02020      | 0,8 | 0,1-0,4        | 0,1-0,3   | ●      |        | ●                |                  |
| CNGN120412S01520      | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        |                  | ○                |
| CNGN120412T00520      | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        |                  | ●                |
| CNGN120412T02020      | 1,2 | 0,1-0,5        | 0,1-0,3   | ○      |        | ○                |                  |
| CNGN120416S01520      | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○                |
| CNGN120416T00520      | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  | ●                |
| CNGN120416T02020      | 1,6 | 0,5-2,0        | 0,1-0,35  |        |        | ○                |                  |
| CNGN120708S01520      | 0,8 | 0,1-0,25       | 0,5-2,5   |        |        |                  | ○                |
| CNGN120708T00520      | 0,8 | 0,1-0,25       | 0,5-2,5   |        |        |                  | ●                |
| CNGN120708T02020      | 0,8 | 0,1-0,4        | 0,1-0,3   | ○      |        |                  |                  |
| CNGN120712S01520      | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        |                  | ○                |
| CNGN120712S02025      | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        |                  | ○                |
| CNGN120712T00520      | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        |                  | ●                |
| CNGN120712T00525      | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        | ○                | ○ ○              |
| CNGN120712T02020      | 1,2 | 0,1-0,5        | 0,1-0,3   | ●      |        | ○                |                  |
| CNGN120716S01520      | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○                |
| CNGN120716T00520      | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○                |
| CNGN120716T01520      | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○                |
| CNGN120716T02020      | 1,6 | 0,1-0,6        | 0,1-0,4   | ○      |        | ○                |                  |
| CNGN160616T02020      | 1,6 | 0,1-0,6        | 0,1-0,4   | ○      |        |                  |                  |
| CNGN160712T01525      | 1,2 | 0,2-2,0        | 0,1-0,3   |        |        | ○                |                  |
| CNGN160716T01525      | 1,6 | 0,1-0,6        | 0,1-0,4   | ○      |        |                  |                  |
| CNGN160716T02020      | 1,6 | 0,5-2,0        | 0,1-0,35  |        |        | ○                |                  |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si3N4  
CR Al2O3 ceramica, rinforzata

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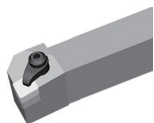
A

Tornitura

Portautensile

CCLNR/L

Kr: 95°



A292

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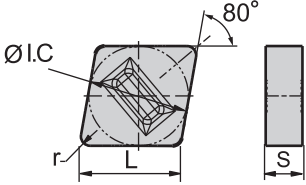
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura (Ceramici)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| CNGX  | L    | I.C  | S    |
|-------|------|------|------|
| 12 07 | 12,9 | 12,7 | 7,94 |

| CN** Inserti negativi                                                             |                  |                |         | CM       | CC     | CN               | CR               |
|-----------------------------------------------------------------------------------|------------------|----------------|---------|----------|--------|------------------|------------------|
|  |                  |                |         | P        |        |                  |                  |
|                                                                                   |                  |                |         | M        |        |                  |                  |
|                                                                                   |                  |                |         | K        |        |                  |                  |
|                                                                                   |                  |                |         | N        |        |                  |                  |
|                                                                                   |                  |                |         | S        |        |                  |                  |
|                                                                                   |                  |                |         | H        |        |                  |                  |
| ISO                                                                               | r                | a <sub>p</sub> | f       | CA1000   | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
|  | CNGX120712T02020 | 1,2            | 0,2-2,0 | 0,1-0,3  |        | ●                |                  |
|                                                                                   | CNGX120716T02020 | 1,6            | 0,5-2,0 | 0,1-0,35 |        | ○                |                  |
|                                                                                   |                  |                |         |          |        |                  |                  |
|                                                                                   |                  |                |         |          |        |                  |                  |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si<sub>3</sub>N<sub>4</sub>  
CR Al<sub>2</sub>O<sub>3</sub> ceramica, rinforzata

| Portautensile                                                                       |
|-------------------------------------------------------------------------------------|
| JCLNR/L                                                                             |
| Kr: 95°                                                                             |
|  |
| A300                                                                                |

A

Tornitura

B

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C

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A

Tornitura

## Inserti - Tornitura (Ceramici)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DNGA  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 15 04 | 15,5 | 12,7 | 4,76 | 5,16 |
| 15 06 | 15,5 | 12,7 | 6,35 | 5,16 |

| DN** Inserti negativi |          |  |  | CM | CC | CN | CR |
|-----------------------|----------|--|--|----|----|----|----|
|                       | <b>P</b> |  |  |    |    |    |    |
|                       | <b>M</b> |  |  |    |    |    |    |
|                       | <b>K</b> |  |  |    |    |    |    |
|                       | <b>N</b> |  |  |    |    |    |    |
|                       | <b>S</b> |  |  |    |    |    |    |
|                       | <b>H</b> |  |  |    |    |    |    |

B

Fresatura

| ISO                     | r   | a <sub>p</sub> | f         | CA1000 | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
|-------------------------|-----|----------------|-----------|--------|--------|------------------|------------------|
| <b>DNGA150404T02020</b> | 0,4 | 0,1-0,3        | 0,08-0,25 |        |        |                  |                  |
| <b>DNGA150408S01520</b> | 0,8 | 0,1-0,25       | 0,5-2,5   |        |        |                  |                  |
| <b>DNGA150408T00520</b> | 0,8 | 0,1-0,25       | 0,5-2,5   |        |        |                  |                  |
| <b>DNGA150408T02020</b> | 0,8 | 0,1-0,4        | 0,1-0,3   |        |        |                  |                  |
| <b>DNGA150412S01520</b> | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        |                  |                  |
| <b>DNGA150412T00520</b> | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        |                  |                  |
| <b>DNGA150412T02020</b> | 1,2 | 0,1-0,5        | 0,1-0,3   |        |        |                  |                  |
| <b>DNGA150416S01520</b> | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  |                  |
| <b>DNGA150416T00520</b> | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  |                  |
| <b>DNGA150604S02020</b> | 0,4 | 0,1-0,3        | 0,08-0,25 |        |        |                  |                  |
| <b>DNGA150604T01020</b> | 0,4 | 0,1-0,3        | 0,08-0,25 |        |        |                  |                  |
| <b>DNGA150604T02020</b> | 0,4 | 0,1-0,3        | 0,08-0,25 |        |        |                  |                  |
| <b>DNGA150608S02020</b> | 0,8 | 0,1-0,4        | 0,1-0,3   |        |        |                  |                  |
| <b>DNGA150608T02020</b> | 0,8 | 0,1-0,4        | 0,1-0,3   |        |        |                  |                  |
| <b>DNGA150612S02020</b> | 1,2 | 0,1-0,5        | 0,1-0,3   |        |        |                  |                  |
| <b>DNGA150612T01020</b> | 1,2 | 0,1-0,5        | 0,1-0,3   |        |        |                  |                  |
| <b>DNGA150612T02020</b> | 1,2 | 0,1-0,5        | 0,1-0,3   |        |        |                  |                  |
| <b>DNGA150616T02020</b> | 1,6 | 0,5-2,0        | 0,1-0,35  |        |        |                  |                  |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si<sub>3</sub>N<sub>4</sub>  
CR Al<sub>2</sub>O<sub>3</sub> ceramica, rinforzata

D

Informazioni tecniche

| Portautensile |         |         |         |            |              |              |
|---------------|---------|---------|---------|------------|--------------|--------------|
| DDJNR/L       | PDJNR/L | PDNNR/L | MDJNR/L | MDPNN      | S***-PDSNR/L | S***-PDUNR/L |
| Kr: 93°       | Kr: 93° | Kr: 63° | Kr: 93° | Kr: 62°30' | Kr: 62°30'   | Kr: 93°      |
|               |         |         |         |            |              |              |
| A231          | A240    | A241    | A254    | A255       | A326         | A327         |

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## Inserti - Tornitura (Ceramici)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DNGN  | L    | I.C  | S    |
|-------|------|------|------|
| 15 07 | 15,5 | 12,7 | 7,94 |
| 15 04 | 15,5 | 12,7 | 4,76 |

| DN** Inserti negativi |                         |                |          | CM        | CC     | CN               | CR               |
|-----------------------|-------------------------|----------------|----------|-----------|--------|------------------|------------------|
|                       | <b>P</b>                | ●              |          |           |        |                  |                  |
|                       | <b>M</b>                |                |          |           |        |                  |                  |
|                       | <b>K</b>                | ●              |          |           |        | ●                |                  |
|                       | <b>N</b>                |                |          |           |        |                  |                  |
|                       | <b>S</b>                |                |          |           |        | ●                | ●                |
|                       | <b>H</b>                |                |          |           | ○      |                  |                  |
| ISO                   | r                       | a <sub>p</sub> | f        | CA1000    | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
|                       | <b>DNGN150408S01520</b> | 0,8            | 0,1-0,25 | 0,5-2,5   |        |                  | ○                |
|                       | <b>DNGN150408T00520</b> | 0,8            | 0,1-0,25 | 0,5-2,5   |        |                  | ●                |
|                       | <b>DNGN150408T02020</b> | 0,8            | 0,1-0,4  | 0,1-0,3   | ○      | ○                |                  |
|                       | <b>DNGN150412S01520</b> | 1,2            | 0,1-0,3  | 0,5-2,5   |        |                  | ○                |
|                       | <b>DNGN150412T00520</b> | 1,2            | 0,1-0,3  | 0,5-2,5   |        |                  | ●                |
|                       | <b>DNGN150412T02020</b> | 1,2            | 0,1-0,5  | 0,1-0,3   | ○      |                  |                  |
|                       | <b>DNGN150416S01520</b> | 1,6            | 0,1-0,35 | 0,5-3,0   |        |                  | ○                |
|                       | <b>DNGN150416T00520</b> | 1,6            | 0,1-0,35 | 0,5-3,0   |        |                  | ○                |
|                       | <b>DNGN150704T02020</b> | 0,4            | 0,1-0,3  | 0,08-0,25 | ○      | ○                |                  |
|                       | <b>DNGN150708T01520</b> | 0,8            | 0,1-0,25 | 0,5-2,5   |        |                  | ○                |
|                       | <b>DNGN150708T02020</b> | 0,8            | 0,1-0,4  | 0,1-0,3   | ●      | ○                |                  |
|                       | <b>DNGN150712T02020</b> | 1,2            | 0,1-0,5  | 0,1-0,3   | ○      | ○                |                  |
|                       | <b>DNGN150716T01520</b> | 1,6            | 0,1-0,35 | 0,5-3,0   |        |                  | ○                |
|                       | <b>DNGN150716T02020</b> | 1,6            | 0,1-0,6  | 0,1-0,4   | ○      |                  |                  |

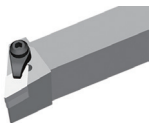
● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si3N4  
CR Al2O3 ceramica, rinforzata

Portautensile

CDJNR/L

Kr: 93°



A294

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Dati di taglio > A366

A

Tornitura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| DNGX  | L    | I.C  | S    |
|-------|------|------|------|
| 15 07 | 15,5 | 12,7 | 7,94 |

### Inserti - Tornitura (Ceramici)

| DN** Inserti negativi |                  |                |          | CM       | CC     | CN               | CR               |
|-----------------------|------------------|----------------|----------|----------|--------|------------------|------------------|
|                       | P                | ●              |          |          |        |                  |                  |
|                       | M                |                |          |          |        |                  |                  |
|                       | K                | ●              |          |          |        | ●                |                  |
|                       | N                |                |          |          |        |                  |                  |
|                       | S                |                |          |          |        | ●                | ●                |
|                       | H                |                |          | ○        |        |                  |                  |
| ISO                   | r                | a <sub>p</sub> | f        | CA1000   | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
|                       | DNGX150708T02020 | 0,8            | 0,15-1,5 | 0,1-0,25 |        | ○                |                  |
|                       | DNGX150712T02020 | 1,2            | 0,2-2,0  | 0,1-0,3  |        | ○                |                  |
|                       | DNGX150716T02020 | 1,6            | 0,5-2,0  | 0,1-0,35 |        | ○                |                  |
|                       |                  |                |          |          |        |                  |                  |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si<sub>3</sub>N<sub>4</sub>  
CR Al<sub>2</sub>O<sub>3</sub> ceramica, rinforzata

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|               |
|---------------|
| Portautensile |
| JDJNR/L       |
| Kr: 93°       |
|               |
| A301          |

Codice sistema > A198

Scelta gradi > A42

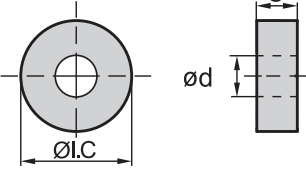
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura (Ceramici)

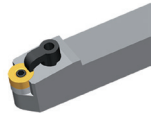
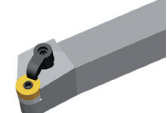
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| RNGA  | I.C  | S    | d |
|-------|------|------|---|
| 12 04 | 12,7 | 4,76 |   |

| RN** Inserti negativi                                                             |                         |         |         | CM     | CC     | CN               | CR               |
|-----------------------------------------------------------------------------------|-------------------------|---------|---------|--------|--------|------------------|------------------|
|  | <b>P</b>                | ●       |         |        |        |                  |                  |
|                                                                                   | <b>M</b>                |         |         |        |        |                  |                  |
|                                                                                   | <b>K</b>                | ●       |         |        |        | ●                |                  |
|                                                                                   | <b>N</b>                |         |         |        |        |                  |                  |
|                                                                                   | <b>S</b>                |         |         |        |        | ●                | ●                |
|                                                                                   | <b>H</b>                |         |         |        | ○      |                  |                  |
| ISO                                                                               | a <sub>p</sub>          | f       |         | CA1000 | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
|  | <b>RNGA120400T02020</b> | 0,1-0,6 | 0,1-0,4 | ○      | ○      |                  |                  |
|                                                                                   |                         |         |         |        |        |                  |                  |
|                                                                                   |                         |         |         |        |        |                  |                  |
|                                                                                   |                         |         |         |        |        |                  |                  |
|                                                                                   |                         |         |         |        |        |                  |                  |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si3N4  
CR Al2O3 ceramica, rinforzata

| Portautensile                                                                       |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| MRDNN                                                                               | MRGNN/L                                                                             |
|  |  |
| A267                                                                                | A268                                                                                |

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| RNGN  | I.C    | S     |
|-------|--------|-------|
| 06 03 | 6,35   | 3,18  |
| 09 04 | 9,525  | 4,76  |
| 09 03 | 9,525  | 3,18  |
| 12 04 | 12,7   | 4,76  |
| 12 07 | 12,7   | 7,94  |
| 15 07 | 15,875 | 7,94  |
| 19 07 | 19,05  | 7,94  |
| 25 07 | 25,4   | 7,94  |
| 25 10 | 25,4   | 10,05 |

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

## Inserti - Tornitura (Ceramici)

| RN** Inserti negativi |                |           |        | CM     | CC               | CN               | CR |
|-----------------------|----------------|-----------|--------|--------|------------------|------------------|----|
|                       |                |           |        | P      |                  |                  |    |
|                       |                |           |        | M      |                  |                  |    |
|                       |                |           |        | K      |                  |                  |    |
|                       |                |           |        | N      |                  |                  |    |
|                       |                |           |        | S      |                  |                  |    |
|                       |                |           |        | H      |                  |                  |    |
| ISO                   | a <sub>p</sub> | f         | CA1000 | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |    |
| RNGN060300T01020      | 0,1-0,3        | 0,08-0,25 | ○      | ○      |                  |                  |    |
| RNGN090300S01520      | 0,1-0,3        | 0,5-2,5   |        |        |                  | ○                |    |
| RNGN090300T00520      | 0,1-0,3        | 0,5-2,5   |        |        |                  | ○ ○              |    |
| RNGN090300T02020      | 0,1-0,3        | 0,1-0,3   | ○      |        |                  |                  |    |
| RNGN090400S01520      | 0,1-0,3        | 0,5-2,5   |        |        |                  | ○                |    |
| RNGN090400T00520      | 0,1-0,3        | 0,5-2,5   |        |        |                  | ○                |    |
| RNGN090400T02020      | 0,1-0,3        | 0,1-0,3   | ○      |        |                  |                  |    |
| RNGN120400S01520      | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○                |    |
| RNGN120400S02020      | 0,1-0,6        | 0,1-0,4   |        | ●      |                  |                  |    |
| RNGN120400T00520      | 0,1-0,35       | 0,5-3,0   |        |        |                  | ●                |    |
| RNGN120400T01020      | 0,5-2,0        | 0,1-0,2   |        |        | ○                |                  |    |
| RNGN120400T01525      | 0,1-0,6        | 0,1-0,4   |        | ○      |                  |                  |    |
| RNGN120400T02020      | 0,1-0,6        | 0,1-0,4   | ○      |        | ○                |                  |    |
| RNGN120700S01520      | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○                |    |
| RNGN120700S02020      | 0,1-0,6        | 0,1-0,4   |        | ●      |                  |                  |    |
| RNGN120700T00520      | 0,1-0,35       | 0,5-3,0   |        |        |                  | ● ●              |    |
| RNGN120700T00525      | 0,1-0,35       | 0,5-3,0   |        |        | ○                | ○ ○              |    |
| RNGN120700T01520      | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○                |    |
| RNGN120700T01525      | 0,2-2,0        | 0,1-0,3   |        |        | ○                |                  |    |
| RNGN120700T02020      | 0,2-2,0        | 0,1-0,3   | ●      |        | ●                |                  |    |
| RNGN150700T02020      | 0,1-0,6        | 0,1-0,5   | ○      |        |                  |                  |    |
| RNGN190700S01520      | 0,1-0,4        | 0,5-3,0   |        |        |                  | ○                |    |
| RNGN190700T00520      | 0,1-0,4        | 0,5-3,0   |        |        |                  | ○                |    |
| RNGN190700T03020      | 0,1-0,7        | 0,1-0,5   | ○      |        |                  |                  |    |
| RNGN250700T19015      | 0,1-0,7        | 0,1-0,8   | ○      |        |                  |                  |    |
| RNGN251000T05020      | 0,1-0,7        | 0,1-0,5   | ○      |        |                  |                  |    |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si<sub>3</sub>N<sub>4</sub>  
CR Al<sub>2</sub>O<sub>3</sub> ceramica, rinforzata

Codice sistema > A198

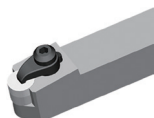
Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366

Portautensile

CRDNN



A298

**A**

Tornitura

**B**

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Dati di taglio > A366

A

Tornitura

## Inserti - Tornitura (Ceramici)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SNGA  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 12 04 | 12,7 | 12,7 | 4,76 | 5,16 |

| SN** Inserti negativi   |     |                |         |          | CM     | CC               | CN               | CR |
|-------------------------|-----|----------------|---------|----------|--------|------------------|------------------|----|
|                         |     |                |         | <b>P</b> |        |                  |                  |    |
|                         |     |                |         | <b>M</b> |        |                  |                  |    |
|                         |     |                |         | <b>K</b> |        |                  |                  |    |
|                         |     |                |         | <b>N</b> |        |                  |                  |    |
|                         |     |                |         | <b>S</b> |        |                  |                  |    |
|                         |     |                |         | <b>H</b> |        |                  |                  |    |
| ISO                     | r   | a <sub>p</sub> | f       | CA1000   | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |    |
| <b>SNGA120404T02020</b> | 0,4 | 0,1-1,0        | 0,1-0,2 |          |        |                  |                  |    |
| <b>SNGA120408S02020</b> | 0,8 | 0,1-0,4        | 0,1-0,3 |          |        |                  |                  |    |
| <b>SNGA120408T02020</b> | 0,8 | 0,1-0,4        | 0,1-0,3 |          |        |                  |                  |    |
| <b>SNGA120412T02020</b> | 1,2 | 0,2-2,0        | 0,1-0,3 |          |        |                  |                  |    |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si<sub>3</sub>N<sub>4</sub>  
CR Al<sub>2</sub>O<sub>3</sub> ceramica, rinforzata

B

Fresatura

C

Foratura

| Portautensile |         |         |         |         |         |         |
|---------------|---------|---------|---------|---------|---------|---------|
| DSBNR/L       | PSBNR/L | PSDNN   | PSKNR/L | PSSNR/L | MSBNR/L | MSRNR/L |
| Kr: 75°       | Kr: 75° | Kr: 45° | Kr: 75° | Kr: 45° | Kr: 75° | Kr: 75° |
|               |         |         |         |         |         |         |
| A232          | A242    | A244    | A245    | A246    | A256    | A257    |

| MSKNR/L | MSDNN   | S***-PSKNR/L |
|---------|---------|--------------|
| Kr: 75° | Kr: 45° | Kr: 75°      |
|         |         |              |
| A258    | A259    | A329         |

D

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## Inserti - Tornitura (Ceramici)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SNGN  | L      | I.C    | S    |
|-------|--------|--------|------|
| 12 07 | 12,7   | 12,7   | 7,94 |
| 12 04 | 12,7   | 12,7   | 4,76 |
| 15 07 | 15,875 | 15,875 | 7,94 |
| 19 07 | 19,05  | 19,05  | 7,94 |

| SN** Inserti negativi |     |                |           | CM     | CC     | CN               | CR               |
|-----------------------|-----|----------------|-----------|--------|--------|------------------|------------------|
|                       |     |                |           | P      |        |                  |                  |
|                       |     |                |           | M      |        |                  |                  |
|                       |     |                |           | K      |        |                  |                  |
|                       |     |                |           | N      |        |                  |                  |
|                       |     |                |           | S      |        |                  |                  |
|                       |     |                |           | H      |        |                  |                  |
| ISO                   | r   | a <sub>p</sub> | f         | CAT000 | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
| SNGN120404T02020      | 0,4 | 0,1-0,3        | 0,08-0,25 | ○      |        |                  |                  |
| SNGN120408S01520      | 0,8 | 0,1-0,25       | 0,5-2,5   |        |        |                  | ○                |
| SNGN120408S02020      | 0,8 | 0,1-0,4        | 0,1-0,3   |        | ○      |                  |                  |
| SNGN120408T00520      | 0,8 | 0,15-1,5       | 0,1-0,25  |        |        | ○                | ●                |
| SNGN120408T02020      | 0,8 | 0,1-0,4        | 0,1-0,3   | ○      |        | ●                |                  |
| SNGN120412S01520      | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        |                  | ○                |
| SNGN120412T00520      | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        |                  | ●                |
| SNGN120412T02020      | 1,2 | 0,1-0,5        | 0,1-0,3   | ○      |        | ○                |                  |
| SNGN120416S01520      | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○                |
| SNGN120416T00520      | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○                |
| SNGN120416T02020      | 1,6 | 0,1-0,6        | 0,1-0,4   | ○      |        | ○                |                  |
| SNGN120704T02020      | 0,4 | 0,1-0,3        | 0,08-0,25 | ●      |        |                  |                  |
| SNGN120708S01520      | 0,8 | 0,1-0,25       | 0,5-2,5   |        |        |                  | ○                |
| SNGN120708T00520      | 0,8 | 0,1-0,25       | 0,5-2,5   |        |        |                  | ●                |
| SNGN120708T02020      | 0,8 | 0,1-0,4        | 0,1-0,3   | ○      | ○      | ○                |                  |
| SNGN120712S01520      | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        |                  | ○                |
| SNGN120712T00520      | 1,2 | 0,1-0,3        | 0,5-2,5   |        |        |                  | ●                |
| SNGN120712T02020      | 1,2 | 0,1-0,5        | 0,1-0,3   | ○      | ○      | ●                |                  |
| SNGN120716S01520      | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○                |
| SNGN120716T00520      | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○                |
| SNGN120716T01520      | 1,6 | 0,1-0,35       | 0,5-3,0   |        |        |                  | ○                |
| SNGN120716T02020      | 1,6 | 0,1-0,6        | 0,1-0,4   | ○      |        |                  |                  |
| SNGN150708T02020      | 0,8 | 0,1-0,4        | 0,1-0,3   | ○      |        |                  |                  |
| SNGN150712T02020      | 1,2 | 0,1-0,5        | 0,1-0,3   | ●      |        | ○                |                  |
| SNGN150716T02020      | 1,6 | 0,1-0,6        | 0,1-0,4   | ●      |        | ○                |                  |
| SNGN190716S02030      | 1,6 | 0,5-2,0        | 0,1-0,35  |        |        | ○                |                  |
| SNGN190716T03020      | 1,6 | 0,1-0,6        | 0,1-0,4   | ○      |        |                  |                  |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si3N4  
CR Al2O3 ceramica, rinforzata

Codice sistema > A198

Scelta gradi > A42

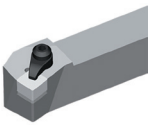
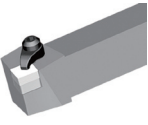
Informazioni tecniche > A501

Dati di taglio > A366



**A**

Tornitura

| Portautensile                                                                     |                                                                                   |                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| CSKNR/L                                                                           | CSRNR/L                                                                           | CSDNN                                                                             |
| Kr: 75°                                                                           | Kr: 75°                                                                           | Kr: 45°                                                                           |
|  |  |  |
| A296                                                                              | A297                                                                              | A299                                                                              |

**B**

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## Inserti - Tornitura (Ceramici)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| SNGX  | L    | I.C  | S    |
|-------|------|------|------|
| 12 07 | 12,7 | 12,7 | 7,94 |

| SN** Inserti negativi |                  |                |         | CM       | CC     | CN               | CR               |
|-----------------------|------------------|----------------|---------|----------|--------|------------------|------------------|
|                       |                  |                |         | P        |        |                  |                  |
|                       |                  |                |         | M        |        |                  |                  |
|                       |                  |                |         | K        |        |                  |                  |
|                       |                  |                |         | N        |        |                  |                  |
|                       |                  |                |         | S        |        |                  |                  |
|                       |                  |                |         | H        |        |                  |                  |
| ISO                   | r                | a <sub>p</sub> | f       | CA1000   | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
|                       | SNGX120712T02020 | 1,2            | 0,2-2,0 | 0,1-0,3  |        | ○                |                  |
|                       | SNGX120716T02020 | 1,6            | 0,5-2,0 | 0,1-0,35 |        | ○                |                  |
|                       |                  |                |         |          |        |                  |                  |
|                       |                  |                |         |          |        |                  |                  |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si<sub>3</sub>N<sub>4</sub>  
CR Al<sub>2</sub>O<sub>3</sub> ceramica, rinforzata

| Portautensile                                                                       |
|-------------------------------------------------------------------------------------|
| <b>JSDNN</b>                                                                        |
| Kr: 45°                                                                             |
|  |
| A302                                                                                |

A

Tornitura

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A

Tornitura

### Inserti - Tornitura (Ceramici)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TNGA  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 04 | 16,5 | 9,525 | 4,76 | 3,86 |
| 22 04 | 22   | 12,7  | 4,76 | 5,16 |

| TN** Inserti negativi |     |                |           |        | CM     | CC               | CN               | CR |
|-----------------------|-----|----------------|-----------|--------|--------|------------------|------------------|----|
|                       | P   | ●              |           |        |        |                  |                  |    |
|                       | M   |                |           |        |        |                  |                  |    |
|                       | K   | ●              |           |        |        |                  | ●                |    |
|                       | N   |                |           |        |        |                  |                  |    |
|                       | S   |                |           |        |        |                  | ●                | ●  |
|                       | H   |                |           |        | ○      |                  |                  |    |
| ISO                   | r   | a <sub>p</sub> | f         | CA1000 | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |    |
| TNGA160404S02020      | 0,4 | 0,1-0,3        | 0,08-0,25 |        | ●      |                  |                  |    |
| TNGA160404T01020      | 0,4 | 0,1-0,3        | 0,08-0,25 |        | ○      | ●                |                  |    |
| TNGA160404T02020      | 0,4 | 0,1-0,3        | 0,08-0,25 |        | ○      |                  |                  |    |
| TNGA160408S02020      | 0,8 | 0,1-0,4        | 0,1-0,3   |        | ●      |                  |                  |    |
| TNGA160408T02020      | 0,8 | 0,1-0,4        | 0,1-0,3   |        | ○      | ●                |                  |    |
| TNGA160412T02020      | 1,2 | 0,1-0,5        | 0,1-0,3   |        | ○      | ●                |                  |    |
| TNGA220408T02020      | 0,8 | 0,15-1,5       | 0,1-0,25  |        |        | ○                |                  |    |
| TNGA220412T02020      | 1,2 | 0,2-2,0        | 0,1-0,3   |        |        | ○                |                  |    |
| TNGA220416T02020      | 1,6 | 0,5-2,0        | 0,1-0,35  |        |        | ○                |                  |    |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si<sub>3</sub>N<sub>4</sub>  
CR Al<sub>2</sub>O<sub>3</sub> ceramica, rinforzata

B

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| Portautensile |               |          |          |          |          |            |
|---------------|---------------|----------|----------|----------|----------|------------|
| DTG NR/L      | PTF NR/L      | PTT NR/L | PTG NR/L | MTG NR/L | MTJ NR/L | MTJ NR/L-Z |
| Kr: 91°       | Kr: 91°       | Kr: 60°  | Kr: 90°  | Kr: 90°  | Kr: 93°  | Kr: 93°    |
|               |               |          |          |          |          |            |
| A233          | A247          | A248     | A249     | A260     | A261     | A262       |
| MTF NR/L      | S***-PTF NR/L |          |          |          |          |            |
| Kr: 91°       | Kr: 90°       |          |          |          |          |            |
|               |               |          |          |          |          |            |
| A263          | A330          |          |          |          |          |            |

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Scelta gradi > A42

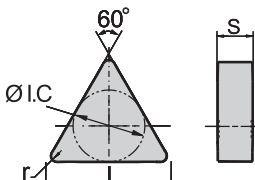
Informazioni tecniche > A501

Dati di taglio > A366

## Inserti - Tornitura (Ceramici)

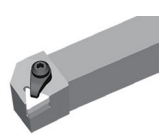
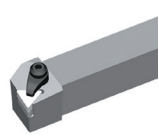
- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TNGN  | L    | I.C   | S    |
|-------|------|-------|------|
| 16 04 | 16,5 | 9,525 | 4,76 |
| 16 07 | 16,5 | 9,525 | 7,94 |
| 22 04 | 22   | 12,7  | 4,76 |

| TN** Inserti negativi                                                             |                  |                |          | CM        | CC     | CN               | CR               |
|-----------------------------------------------------------------------------------|------------------|----------------|----------|-----------|--------|------------------|------------------|
|  |                  |                |          | P         |        |                  |                  |
|                                                                                   |                  |                |          | M         |        |                  |                  |
|                                                                                   |                  |                |          | K         |        |                  |                  |
|                                                                                   |                  |                |          | N         |        |                  |                  |
|                                                                                   |                  |                |          | S         |        |                  |                  |
|                                                                                   |                  |                |          | H         |        |                  |                  |
| ISO                                                                               | r                | a <sub>p</sub> | f        | CA1000    | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
|  | TNGN160404T02020 | 0,4            | 0,1-0,3  | 0,08-0,25 | ○      |                  |                  |
|                                                                                   | TNGN160408S02020 | 0,8            | 0,1-0,4  | 0,1-0,3   |        | ○                |                  |
|                                                                                   | TNGN160408T02020 | 0,8            | 0,1-0,4  | 0,1-0,3   | ○      |                  |                  |
|                                                                                   | TNGN160412T02020 | 1,2            | 0,1-0,5  | 0,1-0,3   | ○      |                  |                  |
|                                                                                   | TNGN160416T02020 | 1,6            | 0,5-2,0  | 0,1-0,35  |        | ○                |                  |
|                                                                                   | TNGN160708T02020 | 0,8            | 0,15-1,5 | 0,1-0,25  |        | ○                |                  |
|                                                                                   | TNGN160712T02020 | 1,2            | 0,1-0,5  | 0,1-0,3   | ○      |                  |                  |
|                                                                                   | TNGN220408T02020 | 0,8            | 0,1-0,4  | 0,1-0,3   | ○      |                  |                  |
|                                                                                   | TNGN220412T02020 | 1,2            | 0,1-0,5  | 0,1-0,3   | ○      |                  |                  |
|                                                                                   | TNGN220416T02020 | 1,6            | 0,1-0,6  | 0,1-0,4   | ○      |                  |                  |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si3N4  
CR Al2O3 ceramica, rinforzata

| Portautensile                                                                       |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| CTJNR/L                                                                             | CTUNR/L                                                                             |
| Kr: 93°                                                                             | Kr: 93°                                                                             |
|  |  |
| A293                                                                                | A295                                                                                |

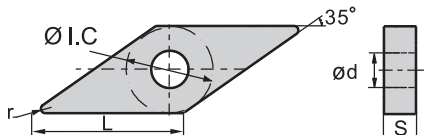
A

Tornitura

## Inserti - Tornitura (Ceramici)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| VNGA  | L    | I.C   | S    | d    |
|-------|------|-------|------|------|
| 16 07 | 16,6 | 9,525 | 7,94 | 3,81 |
| 16 04 | 16,6 | 9,525 | 4,76 | 3,81 |

| VN** Inserti negativi                                                             |          |   |  | CM | CC | CN | CR |
|-----------------------------------------------------------------------------------|----------|---|--|----|----|----|----|
|  | <b>P</b> | ● |  |    |    |    |    |
|                                                                                   | <b>M</b> |   |  |    |    |    |    |
|                                                                                   | <b>K</b> | ● |  |    |    | ●  |    |
|                                                                                   | <b>N</b> |   |  |    |    |    |    |
|                                                                                   | <b>S</b> |   |  |    |    | ●  | ●  |
|                                                                                   | <b>H</b> |   |  | ○  |    |    |    |

B

Fresatura

| ISO                                                                               | r                | a <sub>p</sub> | f       | CA1000    | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
|-----------------------------------------------------------------------------------|------------------|----------------|---------|-----------|--------|------------------|------------------|
|  | VNGA160404S02020 | 0,4            | 0,1-0,3 | 0,08-0,25 | ●      |                  |                  |
|                                                                                   | VNGA160404T01020 | 0,4            | 0,1-0,3 | 0,08-0,25 | ○      |                  |                  |
|                                                                                   | VNGA160408S02020 | 0,4            | 0,1-0,4 | 0,1-0,3   | ●      |                  |                  |
|                                                                                   | VNGA160408T01020 | 0,8            | 0,1-0,4 | 0,1-0,3   | ○      |                  |                  |
|                                                                                   | VNGA160408T02020 | 0,8            | 0,1-0,4 | 0,1-0,3   | ●      |                  |                  |
|                                                                                   | VNGA160708S02020 | 0,8            | 0,1-0,4 | 0,1-0,3   | ●      |                  |                  |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si<sub>3</sub>N<sub>4</sub>  
CR Al<sub>2</sub>O<sub>3</sub> ceramica, rinforzata

C

Foratura

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DVVNN                                                                               | DVJNR/L                                                                             | MVVNN                                                                               | MVJNR/L                                                                             |
| Kr: 72°30'                                                                          | Kr: 93°                                                                             | Kr: 72°30'                                                                          | Kr: 93°                                                                             |
|  |  |  |  |
| A234                                                                                | A235                                                                                | A264                                                                                | A265                                                                                |

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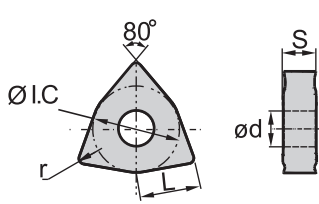
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## Inserti - Tornitura (Ceramici)

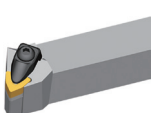
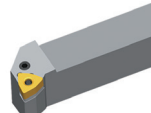
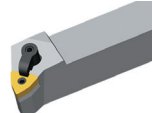
- Buone condizioni di lavorazione  
 ● Condizioni di lavorazione normali  
 ● Condizioni di lavorazione sfavorevoli

| WNGA  | L    | I.C  | S    | d    |
|-------|------|------|------|------|
| 08 04 | 8,69 | 12,7 | 4,76 | 5,16 |

| WN** Inserti negativi                                                             |                  |                |         | CM        | CC     | CN               | CR               |
|-----------------------------------------------------------------------------------|------------------|----------------|---------|-----------|--------|------------------|------------------|
|  |                  |                |         | P         |        |                  |                  |
|                                                                                   |                  |                |         | M         |        |                  |                  |
|                                                                                   |                  |                |         | K         |        |                  |                  |
|                                                                                   |                  |                |         | N         |        |                  |                  |
|                                                                                   |                  |                |         | S         |        |                  |                  |
|                                                                                   |                  |                |         | H         |        |                  |                  |
| ISO                                                                               | r                | a <sub>p</sub> | f       | CA1000    | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
|  | WNGA080404T01020 | 0,4            | 0,1-0,3 | 0,08-0,25 | ○      |                  |                  |
|                                                                                   | WNGA080404T02020 | 0,4            | 0,1-0,3 | 0,08-0,25 | ○      |                  |                  |
|                                                                                   | WNGA080408S02020 | 0,8            | 0,1-0,4 | 0,1-0,3   | ○      |                  |                  |
|                                                                                   | WNGA080408T02020 | 0,8            | 0,1-0,4 | 0,1-0,3   | ○      | ●                |                  |
|                                                                                   | WNGA080412S02020 | 1,2            | 0,1-0,5 | 0,1-0,3   | ○      |                  |                  |
|                                                                                   | WNGA080412T02020 | 1,2            | 0,1-0,5 | 0,1-0,3   | ○      | ●                |                  |
|                                                                                   | WNGA080416T01525 | 1,6            | 0,5-2,0 | 0,1-0,35  |        | ○                |                  |
|                                                                                   | WNGA080416T02020 | 1,6            | 0,5-2,0 | 0,1-0,35  |        | ●                |                  |

● In magazzino ○ Su richiesta

CM Ceramica mista  
 CC Ceramica mista, rivestita  
 CN Ceramica Si3N4  
 CR Al2O3 ceramica, rinforzata

| Portautensile                                                                       |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DWLNR/L                                                                             | PWLNR/L                                                                             | MWLNR/L                                                                             | S***-PWLNR/L                                                                        |
| Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             | Kr: 95°                                                                             |
|  |  |  |  |
| A236                                                                                | A251                                                                                | A266                                                                                | A332                                                                                |

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| RCGX  | I.C | S    | d |
|-------|-----|------|---|
| 06 06 | 6   | 6,35 |   |
| 06 07 | 6   | 7,94 |   |
| 06 04 | 6   | 4,76 |   |
| 09 07 | 9   | 7,94 |   |
| 12 07 | 12  | 7,94 |   |
| 19 10 | 19  | 10   |   |

## Inserti - Tornitura (Ceramici)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| RC** Inserti positivi |                |           | CM     | CC     | CN               | CR               |
|-----------------------|----------------|-----------|--------|--------|------------------|------------------|
|                       | P              |           |        |        |                  |                  |
|                       | M              |           |        |        |                  |                  |
|                       | K              |           |        |        |                  |                  |
|                       | N              |           |        |        |                  |                  |
|                       | S              |           |        |        |                  |                  |
|                       | H              |           |        |        |                  |                  |
| ISO                   | a <sub>p</sub> | f         | CA1000 | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
| RCGX060400S01520      | 0,1-0,25       | 0,5-2,5   |        |        |                  |                  |
| RCGX060400T00520      | 0,1-0,25       | 0,5-2,5   |        |        |                  |                  |
| RCGX060600S02020      | 0,1-0,3        | 0,08-0,25 |        |        |                  |                  |
| RCGX060600T01020      | 0,1-0,25       | 0,5-2,5   |        |        |                  |                  |
| RCGX060700T00525      | 0,1-0,25       | 0,5-2,5   |        |        |                  |                  |
| RCGX090700S01520      | 0,1-0,3        | 0,5-2,5   |        |        |                  |                  |
| RCGX090700T00520      | 0,1-0,3        | 0,5-2,5   |        |        |                  |                  |
| RCGX090700T00525      | 0,1-0,3        | 0,5-2,5   |        |        |                  |                  |
| RCGX090700T20015      | 0,1-0,3        | 0,1-0,3   |        |        |                  |                  |
| RCGX120700E           | 0,5-2,0        | 0,1-0,2   |        |        |                  |                  |
| RCGX120700S01020      | 0,5-2,0        | 0,1-0,2   |        |        |                  |                  |
| RCGX120700S01520      | 0,1-0,35       | 0,5-3,0   |        |        |                  |                  |
| RCGX120700T00520      | 0,1-0,35       | 0,5-3,0   |        |        |                  |                  |
| RCGX120700T00525      | 0,1-0,35       | 0,5-3,0   |        |        |                  |                  |
| RCGX120700T01020      | 0,1-0,35       | 0,5-3,0   |        |        |                  |                  |
| RCGX191000T02020      | 0,1-0,6        | 0,1-0,5   |        |        |                  |                  |

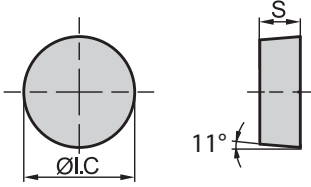
● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si3N4  
CR Al2O3 ceramica, rinforzata

## Inserti - Tornitura (Ceramici)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| RPGN  | I.C  | S    |
|-------|------|------|
| 12 04 | 12,7 | 4,76 |

| RP** Inserti positivi                                                             |                         |          | CM      | CC     | CN               | CR               |
|-----------------------------------------------------------------------------------|-------------------------|----------|---------|--------|------------------|------------------|
|  | <b>P</b>                | ●        |         |        |                  |                  |
|                                                                                   | <b>M</b>                |          |         |        |                  |                  |
|                                                                                   | <b>K</b>                | ●        |         |        | ●                |                  |
|                                                                                   | <b>N</b>                |          |         |        |                  |                  |
|                                                                                   | <b>S</b>                |          |         |        | ●                | ●                |
|                                                                                   | <b>H</b>                |          |         | ○      |                  |                  |
| ISO                                                                               | a <sub>p</sub>          | f        | CA1000  | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
|  | <b>RPGN120400S01520</b> | 0,1-0,35 | 0,5-3,0 |        |                  | ○                |
|                                                                                   | <b>RPGN120400T00520</b> | 0,1-0,35 | 0,5-3,0 |        |                  | ○                |
|                                                                                   |                         |          |         |        |                  |                  |
|                                                                                   |                         |          |         |        |                  |                  |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si<sub>3</sub>N<sub>4</sub>  
CR Al<sub>2</sub>O<sub>3</sub> ceramica, rinforzata

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- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| RPGX  | I.C   | S    |
|-------|-------|------|
| 09 07 | 9,525 | 7,94 |

Inserti - Tornitura (Ceramici)

| RP** Inserti positivi |                |         |        | CM     | CC               | CN               | CR |
|-----------------------|----------------|---------|--------|--------|------------------|------------------|----|
|                       | P              |         |        |        |                  |                  |    |
|                       | M              |         |        |        |                  |                  |    |
|                       | K              |         |        |        |                  |                  |    |
|                       | N              |         |        |        |                  |                  |    |
|                       | S              |         |        |        |                  |                  |    |
|                       | H              |         |        |        |                  |                  |    |
| ISO                   | a <sub>p</sub> | f       | CA1000 | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |    |
| RPGX090700T00525      | 0,1-0,3        | 0,5-2,5 |        |        |                  |                  |    |

● In magazzino ○ Su richiesta

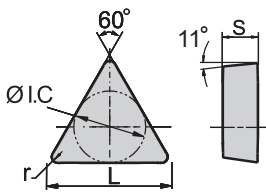
CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si3N4  
CR Al2O3 ceramica, rinforzata



## Inserti - Tornitura (Ceramici)

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| TPGN  | L    | I.C   | S    |
|-------|------|-------|------|
| 11 03 | 11   | 6,35  | 3,18 |
| 16 03 | 16,5 | 9,525 | 3,18 |

| TP** Inserti positivi                                                             |                         |                |         | CM        | CC     | CN               | CR               |
|-----------------------------------------------------------------------------------|-------------------------|----------------|---------|-----------|--------|------------------|------------------|
|  | <b>P</b>                | ●              |         |           |        |                  |                  |
|                                                                                   | <b>M</b>                |                |         |           |        |                  |                  |
|                                                                                   | <b>K</b>                | ●              |         |           |        | ●                |                  |
|                                                                                   | <b>N</b>                |                |         |           |        |                  |                  |
|                                                                                   | <b>S</b>                |                |         |           |        | ●                | ●                |
|                                                                                   | <b>H</b>                |                |         |           | ○      |                  |                  |
| ISO                                                                               | r                       | a <sub>p</sub> | f       | CA1000    | CM1000 | CN1000<br>CS1000 | CW1400<br>CW1800 |
|  | <b>TPGN110304T02020</b> | 0,4            | 0,1-0,3 | 0,08-0,25 | ○      |                  |                  |
|                                                                                   | <b>TPGN160304T01020</b> | 0,4            | 0,1-0,3 | 0,08-0,25 | ○      |                  |                  |
|                                                                                   | <b>TPGN160308T01020</b> | 0,8            | 0,1-0,4 | 0,1-0,3   | ○      |                  |                  |
|                                                                                   |                         |                |         |           |        |                  |                  |

● In magazzino ○ Su richiesta

CM Ceramica mista  
CC Ceramica mista, rivestita  
CN Ceramica Si<sub>3</sub>N<sub>4</sub>  
CR Al<sub>2</sub>O<sub>3</sub> ceramica, rinforzata

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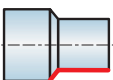
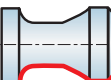
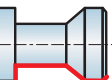
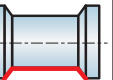
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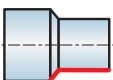
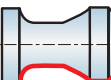
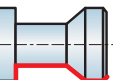
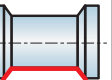
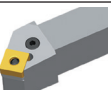
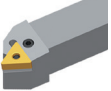
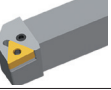
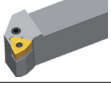
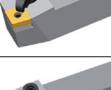
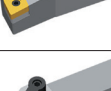
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## Utensili per tornitura esterna

| Portautensile | Applicazione                                                                                           |                                                                                     |                                                                                     |                                                                                     |                                                                                       | Pezzo                                                                                 |                                                                                       | Pagina |
|---------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|               | Lavorazione esterna                                                                                    | Lavorazione planare                                                                 | Lavorazione di profili                                                              | Lavorazione di profili                                                              | Lavorazione di profili                                                                | Stabile                                                                               | Instabile                                                                             |        |
|               |                       |    |    |   |    |    |    |        |
| <b>D</b>      | DCLNR/L<br>95°<br>    |    |    |                                                                                     |                                                                                       |    |                                                                                       | A230   |
|               | DDJNR/L<br>93°<br>    |                                                                                     |    |    |    |    |    | A231   |
|               | DSBNR/L<br>75°<br>    |    |                                                                                     |                                                                                     |                                                                                       |    |                                                                                       | A232   |
|               | DTGNR/L<br>91°<br>    |    |                                                                                     |                                                                                     |                                                                                       |    |                                                                                       | A233   |
|               | DVVNN<br>72.5°<br>    |                                                                                     |                                                                                     |                                                                                     |    |    |                                                                                       | A234   |
|               | DVJNR/L<br>93°<br>   |                                                                                     |   |   |                                                                                       |   |   | A235   |
|               | DWLNLR/L<br>95°<br> |  |  |                                                                                     |                                                                                       |  |                                                                                       | A236   |
| <b>P</b>      | PCBNR/ L<br>75°<br> |  |                                                                                     |                                                                                     |                                                                                       |  |                                                                                       | A237   |
|               | PCLNR/ L<br>95°<br> |  |  |                                                                                     |                                                                                       |  |                                                                                       | A238   |
|               | PDJNR/ L<br>93°<br> |                                                                                     |  |  |  |  |  | A240   |
|               | PDNNR/ L<br>63°<br> |                                                                                     |                                                                                     |                                                                                     |  |  |                                                                                       | A241   |
|               | PSBNR/ L<br>75°<br> |  |                                                                                     |                                                                                     |                                                                                       |  |                                                                                       | A242   |
|               | PSDNN<br>45°<br>    |  |                                                                                     |                                                                                     |  |  |                                                                                       | A244   |
|               | PSKNR/ L<br>75°<br> |                                                                                     |  |                                                                                     |                                                                                       |  |                                                                                       | A245   |

 Raccomandato

**Utensili per tornitura esterna**

| Portautensile |                                                                                                    | Applicazione                                                                        |                                                                                     |                                                                                     |                                                                                     |                                                                                       | Pezzo                                                                                 |                                                                                       | Pagina |
|---------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|               |                                                                                                    | Lavorazione esterna                                                                 | Lavorazione planare                                                                 | Lavorazione di profili                                                              | Lavorazione di profili                                                              | Lavorazione di profili                                                                | Stabile                                                                               | Instabile                                                                             |        |
|               |                                                                                                    |    |    |    |    |     |    |    |        |
| <b>P</b>      | PSSNR/L<br>45°    |    |    |                                                                                     |                                                                                     |                                                                                       |    |                                                                                       | A246   |
|               | PTFNR/L<br>91°    |                                                                                     |    |                                                                                     |                                                                                     |                                                                                       |    |                                                                                       | A247   |
|               | PTTNR/L<br>60°    |    |                                                                                     |                                                                                     |                                                                                     |                                                                                       |    |                                                                                       | A248   |
|               | PTGNR/L<br>90°    |    |                                                                                     |                                                                                     |                                                                                     |                                                                                       |    |                                                                                       | A249   |
|               | PWLNR/L<br>95°    |    |    |                                                                                     |                                                                                     |                                                                                       |    |                                                                                       | A251   |
|               | PLANR/L<br>90°  |  |  |                                                                                     |                                                                                     |  |  |                                                                                       | A316   |
|               | PLFNR/L<br>90°  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                       |  |                                                                                       | A317   |
|               | PCLNR/L<br>95°  |  |  |                                                                                     |                                                                                     |                                                                                       |  |                                                                                       | A318   |
| <b>M</b>      | MCBNR/L<br>75°  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                       |  |                                                                                       | A252   |
|               | MCLNR/L<br>95°  |  |  |                                                                                     |                                                                                     |                                                                                       |  |                                                                                       | A253   |
|               | MDJNR/L<br>93°  |                                                                                     |                                                                                     |  |  |  |  |  | A254   |
|               | MDPNN<br>62.5°  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |                                                                                       | A255   |
|               | MSBNR/L<br>75°  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                       |  |                                                                                       | A256   |
|               | MSRNR/L<br>75°  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                       |  |                                                                                       | A257   |

 Raccomandato

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

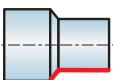
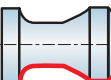
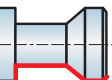
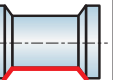
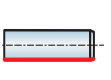
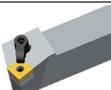
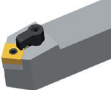
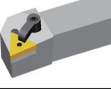
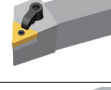
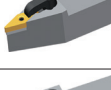
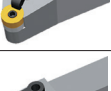
**D**

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**E**

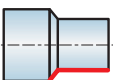
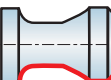
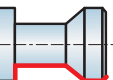
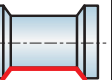
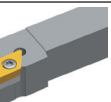
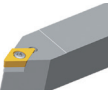
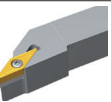
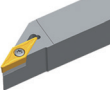
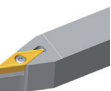
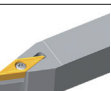
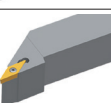
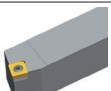
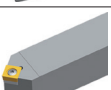
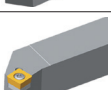
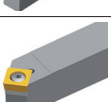
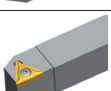
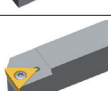
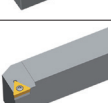
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## Utensili per tornitura esterna

| Portautensile | Applicazione                                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                       | Pezzo                                                                                 |                                                                                       | Pagina |
|---------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|               | Lavorazione esterna                                                                                | Lavorazione planare                                                                 | Lavorazione di profili                                                              | Lavorazione di profili                                                              | Lavorazione di profili                                                                | Stabile                                                                               | Instabile                                                                             |        |
|               |                   |    |    |   |    |    |    |        |
| <b>M</b>      | MSKNR/L<br>75°    |                                                                                     |    |                                                                                     |                                                                                       |    |                                                                                       | A258   |
|               | MSDNN<br>45°      |                                                                                     |                                                                                     |                                                                                     |    |    |                                                                                       | A259   |
|               | MTGNR/L<br>90°    |    |                                                                                     |                                                                                     |                                                                                       |    |                                                                                       | A260   |
|               | MTJNR/L<br>93°    |    |                                                                                     |                                                                                     |                                                                                       |    |                                                                                       | A261   |
|               | MTJNR/L-Z<br>93°  |                                                                                     |    |    |                                                                                       |    |                                                                                       | A262   |
|               | MTFNR/L<br>91°  |                                                                                     |  |                                                                                     |                                                                                       |  |                                                                                       | A263   |
|               | MVVNN<br>72,5°  |                                                                                     |                                                                                     |                                                                                     |  |  |                                                                                       | A264   |
|               | MVJNR/L<br>93°  |                                                                                     |  |  |                                                                                       |  |  | A265   |
|               | MWLNRL<br>95°   |  |  |                                                                                     |                                                                                       |  |                                                                                       | A266   |
|               | MRGNR/L<br>–    |                                                                                     |  |                                                                                     |                                                                                       |  |                                                                                       | A268   |
|               | MRDNN<br>–      |                                                                                     |                                                                                     |                                                                                     |  |  |                                                                                       | A267   |
| <b>S</b>      | SCACR/L<br>90°  |  |                                                                                     |                                                                                     |                                                                                       |  |  | A269   |
|               | SCLCR/L<br>95°  |  |  |                                                                                     |                                                                                       |  |  | A270   |
|               | SDACR/L<br>90°  |                                                                                     |                                                                                     |  |                                                                                       |  |  | A271   |

 Raccomandato

## Utensili per tornitura esterna

| Portautensile |                                                                                                    | Applicazione                                                                        |                                                                                     |                                                                                   |                                                                                     |                                                                                       | Pezzo                                                                                 |                                                                                       | Pagina |
|---------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|               |                                                                                                    | Lavorazione esterna                                                                 | Lavorazione planare                                                                 | Lavorazione di profili                                                            | Lavorazione di profili                                                              | Lavorazione di profili                                                                | Stabile                                                                               | Instabile                                                                             |        |
|               |                                                                                                    |    |    |  |    |     |    |    |        |
| S             | SDJCR/L<br>93°    |    |                                                                                     |                                                                                   |    |                                                                                       |    |    | A272   |
|               | SDNCN<br>63°      |                                                                                     |                                                                                     |                                                                                   |                                                                                     |    |    |    | A273   |
|               | SVJBR/L<br>93°    |    |                                                                                     |                                                                                   |    |                                                                                       |    |    | A274   |
|               | SVABR/L<br>90°    |    |                                                                                     |                                                                                   |    |                                                                                       |    |    | A275   |
|               | SVVBN<br>72,5°    |                                                                                     |                                                                                     |                                                                                   |                                                                                     |    |    |    | A276   |
|               | SVVCN<br>72,5°   |                                                                                     |                                                                                     |                                                                                   |                                                                                     |  |  |  | A277   |
|               | SVJCR/L<br>93°  |  |                                                                                     |                                                                                   |  |                                                                                       |  |  | A278   |
|               | SSBCR/L<br>75°  |  |                                                                                     |                                                                                   |                                                                                     |                                                                                       |  |                                                                                       | A279   |
|               | SSDCN<br>45°    |                                                                                     |                                                                                     |                                                                                   |                                                                                     |  |  |                                                                                       | A280   |
|               | SSKCR/L<br>75°  |                                                                                     |  |                                                                                   |                                                                                     |                                                                                       |  |                                                                                       | A281   |
|               | SSSCR/L<br>45°  |  |                                                                                     |                                                                                   |                                                                                     |                                                                                       |  |                                                                                       | A282   |
|               | STACR/L<br>90°  |  |                                                                                     |                                                                                   |                                                                                     |                                                                                       |  |  | A283   |
|               | STFCR/L<br>91°  |                                                                                     |  |                                                                                   |                                                                                     |                                                                                       |  |                                                                                       | A284   |
|               | STGCR/L<br>91°  |  |                                                                                     |                                                                                   |                                                                                     |                                                                                       |  |  | A285   |

 Raccomandato

A

Tornitura

B

Fresatura

C

Foratura

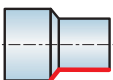
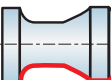
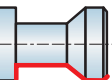
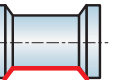
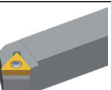
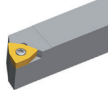
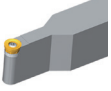
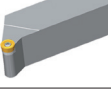
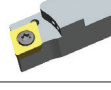
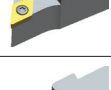
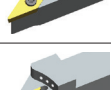
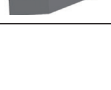
D

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tecniche

E

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## Utensili per tornitura esterna

| Portautensile | Applicazione                                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                       | Pezzo                                                                                 |                                                                                       | Pagina |
|---------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|               | Lavorazione esterna                                                                                          | Lavorazione planare                                                                 | Lavorazione di profili                                                              | Lavorazione di profili                                                              | Lavorazione di profili                                                                | Stabile                                                                               | Instabile                                                                             |        |
|               |                             |    |    |   |    |    |    |        |
| S             | STTCR/L<br>60°<br>          |    |                                                                                     |                                                                                     |                                                                                       |    |                                                                                       | A286   |
|               | SWACR/L<br>90°<br>          |    |                                                                                     |                                                                                     |                                                                                       |    |    | A287   |
|               | SRDCN<br>—<br>              |                                                                                     |                                                                                     |                                                                                     |    |    |                                                                                       | A288   |
|               | SRGCR/L<br>—<br>            |                                                                                     |    |                                                                                     |                                                                                       |    |                                                                                       | A289   |
|               | SCACR/L-SC<br>90°<br>       |    |                                                                                     |                                                                                     |                                                                                       |    |    | A306   |
|               | SCLCR/L-SC<br>95°<br>     |  |  |                                                                                     |                                                                                       |  |  | A307   |
|               | SDACR/L-SC<br>90°<br>     |                                                                                     |                                                                                     |  |                                                                                       |  |  | A308   |
|               | SDHCR/L-SC<br>107°30'<br> |                                                                                     |                                                                                     |  |                                                                                       |  |  | A309   |
|               | SDJCR/L-SC<br>93°<br>     |  |                                                                                     |  |                                                                                       |  |  | A310   |
|               | SDNCN-SC<br>62°30'<br>    |                                                                                     |                                                                                     |                                                                                     |  |  |  | A311   |
|               | SVACR/L-SC<br>90°<br>     |  |                                                                                     |  |                                                                                       |  |  | A312   |
|               | SVJCR/L-SC<br>93°<br>     |  |                                                                                     |  |                                                                                       |  |  | A313   |
| C             | CKJNR/L<br>93°<br>        |  |                                                                                     |  |                                                                                       |  |                                                                                       | A290   |
|               | CKNNR/L<br>63°<br>        |                                                                                     |                                                                                     |                                                                                     |  |  |                                                                                       | A291   |

 Raccomandato

**Note****A**

Tornitura

**B**

Fresatura

**C**

Foratura

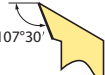
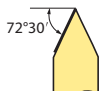
**D**Informazioni  
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**P C L N L 25 25 M 12**

**1 2 3 4 5 6 7 8 9**

| Sistema di bloccaggio |                                        |                                                                                    | Forma dell'inserto |                                                                                      |
|-----------------------|----------------------------------------|------------------------------------------------------------------------------------|--------------------|--------------------------------------------------------------------------------------|
| Code                  | Descrizione                            |                                                                                    |                    |                                                                                      |
| P                     | Bloccaggio a leva                      |   | C                  |   |
| M                     | Sistema di bloccaggio a staffa / perno |   | D                  |   |
| S                     | Bloccaggio a vite                      |   | R                  |   |
| C/J                   | Bloccaggio a staffa                    |   | S                  |   |
| D                     | Doppio bloccaggio                      |  | T                  |   |
|                       |                                        |                                                                                    | V                  |   |
|                       |                                        |                                                                                    | W                  |  |
| <b>1</b>              |                                        |                                                                                    | <b>2</b>           |                                                                                      |

| Forma portautensile e angolo di regolazione                                         |                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |   |
| A                                                                                   | B                                                                                   | C                                                                                   | D                                                                                   | E                                                                                     |
|  |  |  |  |  |
| F                                                                                   | G                                                                                   | H                                                                                   | J                                                                                   | K                                                                                     |
|  |  |  |  |   |
| L                                                                                   | M                                                                                   | N                                                                                   | O                                                                                   | P                                                                                     |
|  |  |  |  |   |
| Q                                                                                   | R                                                                                   | S                                                                                   | T                                                                                   | U                                                                                     |
|  |  |  |                                                                                     |                                                                                       |
| V                                                                                   | W                                                                                   | X                                                                                   |                                                                                     |                                                                                       |

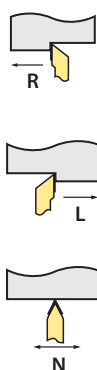
| Angolo di spoglia inferiore                                                                |                                                                                            |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| B<br> | C<br> |
| D<br> | E<br> |
| N<br> | P<br> |

3

4



Direzione di taglio



5

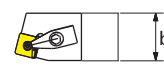
Altezza stelo h [mm]



| Code | h  |
|------|----|
| 12   | 12 |
| 16   | 16 |
| 20   | 20 |
| 25   | 25 |
| 32   | 32 |
| 40   | 40 |
| 50   | 50 |

6

Larghezza stelo b [mm]



| Code | b  |
|------|----|
| 12   | 12 |
| 16   | 16 |
| 20   | 20 |
| 25   | 25 |
| 32   | 32 |
| 40   | 40 |
| 50   | 50 |

7

Lungh. portautensile L [mm]



| Code | L   |
|------|-----|
| H    | 100 |
| K    | 125 |
| M    | 150 |
| P    | 170 |
| Q    | 180 |
| R    | 200 |
| S    | 250 |
| T    | 300 |

8

Lunghezza tagliente [mm]

Forma dell'inserto

| I.C<br>[mm] | Forma dell'inserto                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|             |  |  |  |  |  |  |  |
|             | C                                                                                 | D                                                                                 | R                                                                                 | S                                                                                   | T                                                                                   | V                                                                                   | W                                                                                   |
| 5,56        | 09                                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 6,35        | 06                                                                                | 07                                                                                | 11                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 9,525       | 09                                                                                | 11                                                                                | 09                                                                                | 09                                                                                  | 16                                                                                  | 16                                                                                  | 06                                                                                  |
| 12,7        | 12                                                                                | 15                                                                                | 12                                                                                | 12                                                                                  | 22                                                                                  | 22                                                                                  | 08                                                                                  |
| 15,875      | 16                                                                                | 19                                                                                | 15                                                                                | 15                                                                                  | 27                                                                                  |                                                                                     |                                                                                     |
| 19,05       | 19                                                                                | 19                                                                                |                                                                                   | 19                                                                                  | 33                                                                                  |                                                                                     |                                                                                     |
| 25,4        | 25                                                                                | 25                                                                                |                                                                                   | 25                                                                                  | 44                                                                                  |                                                                                     |                                                                                     |
| 32          | 32                                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

9

A

Tornitura

B

Fresatura

C

Foratura

D

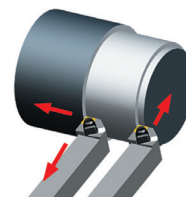
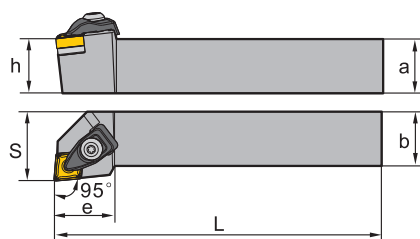
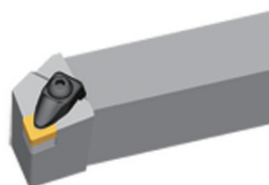
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## CN\*\* Portautensile (esterno) **D-Bloccaggio**

DCLNR/L Kr: 95°



| Articolo       |  | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto                                                                             |
|----------------|-----------------------------------------------------------------------------------|-------|---|-----------------|----|-----|----|----|----|-------------------------------------------------------------------------------------|
|                |                                                                                   | R     | L | a               | b  | L   | h  | s  | e  |  |
| DCLNR/L1616H09 |                                                                                   | ●     | ○ | 16              | 16 | 100 | 16 | 20 | 24 | CN**0903**                                                                          |
| DCLNR/L2020K09 |                                                                                   | ●     | ● | 20              | 20 | 125 | 20 | 25 | 24 | CN**0903**                                                                          |
| DCLNR/L2525M09 |                                                                                   | ●     | ● | 25              | 25 | 150 | 25 | 32 | 24 | CN**0903**                                                                          |
| DCLNR/L2020K12 |                                                                                   | ●     | ● | 20              | 20 | 125 | 20 | 25 | 28 | CN**1204**                                                                          |
| DCLNR/L2525M12 |                                                                                   | ●     | ● | 25              | 25 | 150 | 25 | 32 | 28 | CN**1204**                                                                          |
| DCLNR/L3225P12 |                                                                                   | ●     | ● | 32              | 25 | 170 | 32 | 32 | 28 | CN**1204**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                          |                     |                     |
|-------------------|--------------------------|---------------------|---------------------|
|                   | Inserto                  | CN**0903**          | CN**1204**          |
|                   | h                        | 16-25               | 20-32               |
|                   | Staffa                   | C1RA                | C2RA                |
|                   | Vite (staffa)            | CM5x22C<br>(4,0 Nm) | CM6x25C<br>(7,0 Nm) |
|                   | Vite (sottoplacchetta)   | SM5x8.65XA1         | SM6x10XA1           |
|                   | Sottoplacchetta          | C09BM               | C12BM               |
|                   | Molla                    | SPR6                | SPR4                |
|                   | Chiave (sottoplacchetta) | WH30L               | WH40L               |
|                   | Chiave (staffa)          | WH30L               | WH40L               |

| Inserto    |          |              |             |                      |          |
|------------|----------|--------------|-------------|----------------------|----------|
|            |          |              |             |                      |          |
| Raschiante | Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A51        | A52      | A53          | A57         | A61                  | A177     |

Codice sistema > A228

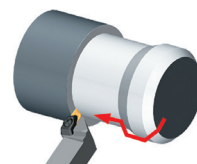
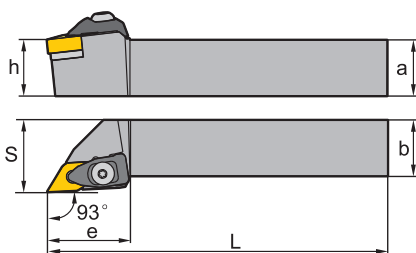
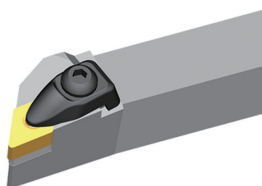
Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366

## DN\*\* Portautensile (esterno) D-Bloccaggio

DDJNR/L Kr: 93°



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| DDJNR/L1616H11 | ● | ●     |   | 16              | 16 | 100 | 16 | 20 | 30 | DN**1104** |
| DDJNR/L2020K11 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 30 | DN**1104** |
| DDJNR/L2525M11 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 30 | DN**1104** |
| DDJNR/L3225P11 | ○ | ○     |   | 32              | 25 | 170 | 32 | 32 | 30 | DN**1104** |
| DDJNR/L2020K15 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 35 | DN**1506** |
| DDJNR/L2525M15 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 35 | DN**1506** |
| DDJNR/L3232P15 | ● | ●     |   | 32              | 32 | 170 | 32 | 40 | 35 | DN**1506** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|  | Inserto                  | DN**1104**          | DN**1506**          |
|--|--------------------------|---------------------|---------------------|
|  | h                        | 16-32               | 20-32               |
|  | Staffa                   | C1RA                | C2RA                |
|  | Vite (staffa)            | CM5x22C<br>(4,0 Nm) | CM6x25C<br>(7,0 Nm) |
|  | Vite (sottoplacchetta)   | SM5x8.65XA1         | SM6x10XA1           |
|  | Sottoplacchetta          | D11BM               | D15BM               |
|  | Molla                    | SPR6                | SPR4                |
|  | Chiave (sottoplacchetta) | WH30L               | WH40L               |
|  | Chiave (staffa)          | WH30L               | WH40L               |

## Inserto

|     |     |     |     |     |      |
|-----|-----|-----|-----|-----|------|
|     |     |     |     |     |      |
| A62 | A63 | A63 | A68 | A69 | A178 |

Codice sistema &gt; A228

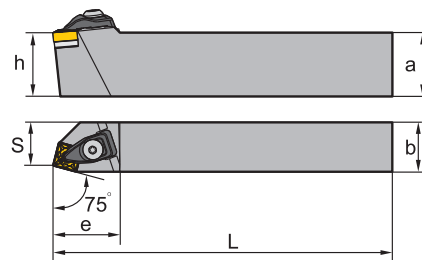
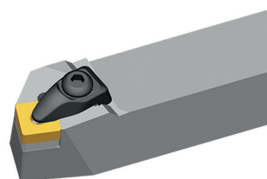
Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

Dati di taglio &gt; A366

## SN\*\* Portautensile (esterno) **D-Bloccaggio**

DSBNR/L Kr: 75°



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| DSBNR/L1616H09 | ○ |       |   | 16              | 16 | 100 | 16 | 13 | 26 | SN**0903** |
| DSBNR/L2020K12 | ● | ●     |   | 20              | 20 | 125 | 20 | 17 | 34 | SN**1204** |
| DSBNR/L2525M12 | ● | ●     |   | 25              | 25 | 150 | 25 | 22 | 34 | SN**1204** |
| DSBNR/L3225P12 | ● | ●     |   | 32              | 25 | 170 | 32 | 22 | 34 | SN**1204** |
| DSBNR/L3232P15 | ● | ●     |   | 32              | 32 | 170 | 32 | 27 | 41 | SN**1506** |

● In magazzino ○ Su richiesta

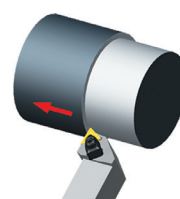
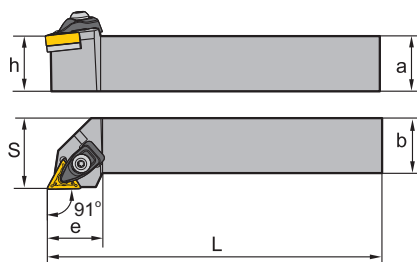
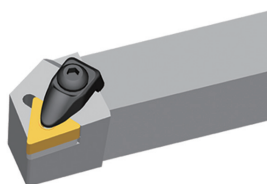
\* Con raffreddamento interno

| Parti di ricambio |                          |                     |                     |                     |
|-------------------|--------------------------|---------------------|---------------------|---------------------|
|                   | Inserto                  | SN**0903**          | SN**1204**          | SN**1506**          |
|                   | h                        | 16                  | 20-32               | 32                  |
|                   | Staffa                   | C1RA                | C2RA                | C3RA                |
|                   | Vite (staffa)            | CM5×22C<br>(4,0 Nm) | CM6×25C<br>(7,0 Nm) | CM6×25C<br>(7,0 Nm) |
|                   | Vite (sottoplacchetta)   | SM5×8.65XA1         | SM6×10XA1           | SM6×10XA2           |
|                   | Sottoplacchetta          | S09BM               | S12BM               | S15BM               |
|                   | Molla                    | SPR6                | SPR4                | SPR4                |
|                   | Chiave (sottoplacchetta) | WH30L               | WH40L               | WH40L               |
|                   | Chiave (staffa)          | WH30L               | WH40L               | WH40L               |

| Inserto  |              |             |                      |          |
|----------|--------------|-------------|----------------------|----------|
|          |              |             |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A73      | A73          | A78         | A84                  | A162     |

## TN\*\* Portautensile (esterno) D-Bloccaggio

DTGNR/L Kr: 91°



| Articolo       | * | Stock |    | Dimensioni [mm] |     |    |    |    |    | Inserto                                                                             |
|----------------|---|-------|----|-----------------|-----|----|----|----|----|-------------------------------------------------------------------------------------|
|                |   | R     | L  | a               | b   | L  | h  | s  | e  |  |
| DTGNR/L1616H16 | ● | ●     | 16 | 16              | 100 | 16 | 20 | 25 | 25 | TN**1604**                                                                          |
| DTGNR/L2020K16 | ● | ●     | 20 | 20              | 125 | 20 | 25 | 25 | 25 | TN**1604**                                                                          |
| DTGNR/L2525M16 | ● | ●     | 25 | 25              | 150 | 25 | 32 | 25 | 25 | TN**1604**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|                                                                                     | Inserto<br>h             | TN**1604**<br>16-25 |
|-------------------------------------------------------------------------------------|--------------------------|---------------------|
|  | Staffa                   | C1RA                |
|  | Vite (staffa)            | CM5x22C<br>(4,0 Nm) |
|  | Vite (sottoplacchetta)   | SM5x8.65XA1         |
|  | Sottoplacchetta          | T16BM               |
|  | Molla                    | SPR6                |
|  | Chiave (sottoplacchetta) | WH30L               |
|  | Chiave (staffa)          | WH30L               |

## Inserto

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Raschiante                                                                          | Finitura                                                                            | Media Lavor.                                                                        | Sgrossatura                                                                         | Lavor.- ghisa grigia                                                                | PCBN/PCD                                                                              |
| A87                                                                                 | A88                                                                                 | A90                                                                                 | A92                                                                                 | A99                                                                                 | A163                                                                                  |

Codice sistema &gt; A228

Scelta gradi &gt; A42

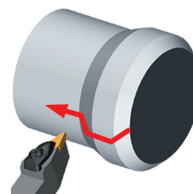
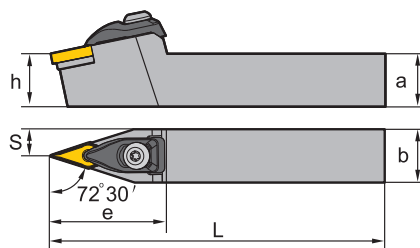
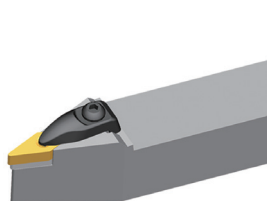
Informazioni tecniche &gt; A501

Dati di taglio &gt; A366

## VN\*\* Portautensile (esterno)

D-Bloccaggio

DVVNN Kr: 72°30'



| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |      |    | Inserto    |
|--------------|---|-------|-----------------|----|-----|----|------|----|------------|
|              |   |       | a               | b  | L   | h  | s    | e  |            |
| DVVNN2020K16 | ● |       | 20              | 20 | 125 | 20 | 10   | 44 | VN**1604** |
| DVVNN2525M16 | ● |       | 25              | 25 | 150 | 25 | 12,5 | 44 | VN**1604** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

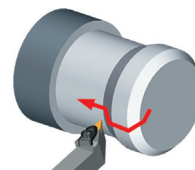
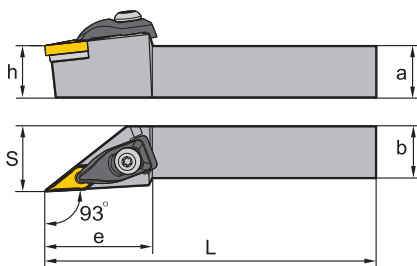
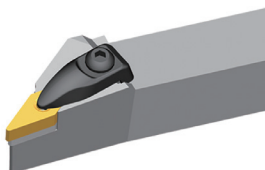
|  | Inserto                  | VN**1604**          |
|--|--------------------------|---------------------|
|  | h                        | 20-25               |
|  | Staffa                   | C6RA                |
|  | Vite (staffa)            | CM5x22C<br>(4,0 Nm) |
|  | Vite (sottoplacchetta)   | SM5x8.65XA1         |
|  | Sottoplacchetta          | V16BM               |
|  | Molla                    | SPR6                |
|  | Chiave (sottoplacchetta) | WH30L               |
|  | Chiave (staffa)          | WH30L               |

### Inserto

|          |              |             |                     |          |
|----------|--------------|-------------|---------------------|----------|
|          |              |             |                     |          |
| Finitura | Media Lavor. | Sgrossatura | Lavor- ghisa grigia | PCBN/PCD |
| A102     | A102         | A104        | A103                | A179     |

## VN\*\* Portautensile (esterno) D-Bloccaggio

DVJNR/L Kr: 93°



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| DVJNR/L2020K16 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 41 | VN**1604** |
| DVJNR/L2525M16 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 41 | VN**1604** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|  | Inserto                  | VN**1604**          |
|--|--------------------------|---------------------|
|  | h                        | 20-25               |
|  | Staffa                   | C6RA                |
|  | Vite (staffa)            | CM5×22C<br>(4,0 Nm) |
|  | Vite (sottoplacchetta)   | SM5×8.65XA1         |
|  | Sottoplacchetta          | V16BM               |
|  | Molla                    | SPR6                |
|  | Chiave (staffa)          | WH30L               |
|  | Chiave (sottoplacchetta) | WH30L               |

## Inserto

|          |              |             |                      |          |
|----------|--------------|-------------|----------------------|----------|
|          |              |             |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A102     | A102         | A104        | A103                 | A179     |

A

Tornitura

B

Fresatura

C

Foratura

D

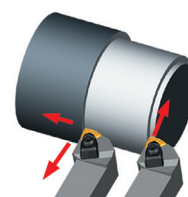
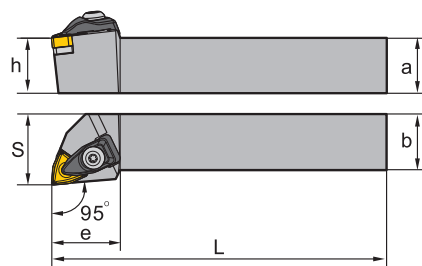
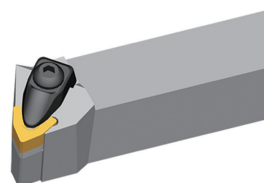
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## WN\*\* Portautensile (esterno) D-Bloccaggio

DWLNLR/L Kr: 95°



| Articolo        | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|-----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                 |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| DWLNLR/L1616H06 | • | •     |   | 16              | 16 | 100 | 16 | 25 | 24 | WN**0604** |
| DWLNLR/L2020K06 | • | •     |   | 20              | 20 | 125 | 20 | 25 | 24 | WN**0604** |
| DWLNLR/L2525M06 | • | •     |   | 25              | 25 | 150 | 25 | 32 | 24 | WN**0604** |
| DWLNLR/L2020K08 | • | •     |   | 20              | 20 | 125 | 20 | 25 | 31 | WN**0804** |
| DWLNLR/L2525M08 | • | •     |   | 25              | 25 | 150 | 25 | 32 | 31 | WN**0804** |
| DWLNLR/L3225P08 | • | •     |   | 32              | 25 | 170 | 32 | 32 | 31 | WN**0804** |

• In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                          |                     |                     |
|-------------------|--------------------------|---------------------|---------------------|
|                   | Inserto                  | WN**0604**          | WN**0804**          |
|                   | h                        | 16-25               | 20-32               |
|                   | Staffa                   | C1RA                | C2RA                |
|                   | Vite (staffa)            | CM5x22C<br>(4,0 Nm) | CM6x25C<br>(7,0 Nm) |
|                   | Vite (sottoplacchetta)   | SM5x8.65XA1         | SM6x10XA1           |
|                   | Sottoplacchetta          | W06BM               | W08BM               |
|                   | Molla                    | SPR6                | SPR4                |
|                   | Chiave (sottoplacchetta) | WH30L               | WH40L               |
|                   | Chiave (staffa)          | WH30L               | WH40L               |

| Inserto    |          |              |             |                      |          |
|------------|----------|--------------|-------------|----------------------|----------|
|            |          |              |             |                      |          |
| Raschiante | Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A106       | A107     | A107         | A109        | A111                 | A165     |

Codice sistema > A228

Scelta gradi > A42

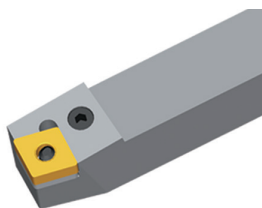
Informazioni tecniche > A501

Dati di taglio > A366

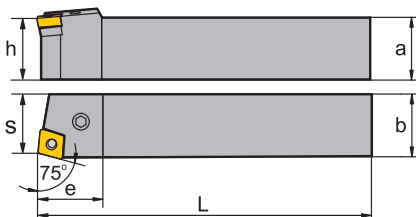


**CN\*\* Portautensile (esterno) P-Bloccaggio**

PCBNR/L Kr: 75°



Versione destra



| Articolo         | * | Stock |    | Dimensioni [mm] |     |    |    |    |    | Inserto    |
|------------------|---|-------|----|-----------------|-----|----|----|----|----|------------|
|                  |   | R     | L  | a               | b   | L  | h  | s  | e  |            |
| PCBNR/L2020K12   | ● | ●     | 20 | 20              | 125 | 20 | 17 | 27 | 27 | CN**1204** |
| PCBNR/L2525M12   | ● | ●     | 25 | 25              | 150 | 25 | 22 | 27 | 27 | CN**1204** |
| PCBNR/L3232P12   | ● | ●     | 32 | 32              | 170 | 32 | 27 | 27 | 27 | CN**1204** |
| PCBNR/L2525M16   | ● | ●     | 25 | 25              | 150 | 25 | 22 | 33 | 33 | CN**1606** |
| PCBNR/L3232P16   | ● | ●     | 32 | 32              | 170 | 32 | 27 | 33 | 33 | CN**1606** |
| PCBNR/L3232P19   | ● | ●     | 32 | 32              | 170 | 32 | 27 | 38 | 38 | CN**1906** |
| PCBNR/L4040S19   | ● | ●     | 40 | 40              | 250 | 40 | 35 | 38 | 38 | CN**1906** |
| PCBNR/L4040S2507 | ● | ●     | 40 | 40              | 250 | 40 | 35 | 50 | 50 | CN**2507** |
| PCBNR/L4040S2509 | ● | ●     | 40 | 40              | 250 | 40 | 35 | 50 | 50 | CN**2509** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio            |                      |                      |                       |                        |                        |  |
|------------------------------|----------------------|----------------------|-----------------------|------------------------|------------------------|--|
| Inserto                      | CN**1204**           | CN**1606**           | CN**1906**            | CN**2507**             | CN**2509**             |  |
| h                            | 20-32                | 25-32                | 32-40                 | 40                     | 40                     |  |
| Leva di fissaggio            | L4                   | L5                   | L6                    | L8                     | L8                     |  |
| Vite                         | LEM8x21<br>(10,2 Nm) | LEM8x25<br>(10,2 Nm) | LEM10x27<br>(16,6 Nm) |                        |                        |  |
| Vite                         |                      |                      |                       | LEM12x36A<br>(25,2 Nm) | LEM12x36A<br>(25,2 Nm) |  |
| Sottopiacchetta              | C12AP                | C16AP                | C19AP                 | C25AP-07               | C25AP                  |  |
| Perno dist (sottopiacchetta) | SP4                  | SP5                  | SP6                   | SP8                    | SP8                    |  |
| Chiave                       | WH30L                | WH30L                | WH40L                 | WH50L                  | WH50L                  |  |

| Inserto    |          |              |             |                      |          |
|------------|----------|--------------|-------------|----------------------|----------|
|            |          |              |             |                      |          |
| Raschiante | Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A51        | A52      | A53          | A57         | A61                  | A177     |

Codice sistema &gt; A228

Scelta gradi &gt; A42

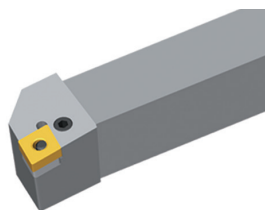
Informazioni tecniche &gt; A501

Dati di taglio &gt; A366

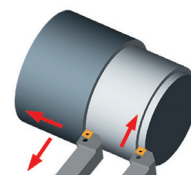
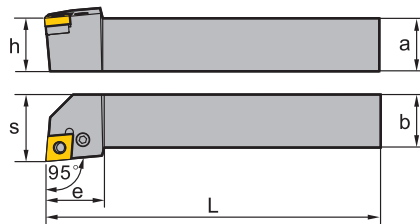
## CN\*\* Portautensile (esterno)

### P-Bloccaggio

PCLNR/L Kr: 95°



Versione destra



| Articolo         |  | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto                                                                             |
|------------------|-----------------------------------------------------------------------------------|-------|---|-----------------|----|-----|----|----|----|-------------------------------------------------------------------------------------|
|                  |                                                                                   | R     | L | a               | b  | L   | h  | s  | e  |  |
| PCLNR/L1616H09   |                                                                                   | ●     | ● | 16              | 16 | 100 | 16 | 20 | 20 | CN**0903**                                                                          |
| PCLNR/L2020K09   |                                                                                   | ●     | ● | 20              | 20 | 125 | 20 | 25 | 22 | CN**0903**                                                                          |
| PCLNR/L2525M09   |                                                                                   | ○     | ● | 25              | 25 | 150 | 25 | 32 | 22 | CN**0903**                                                                          |
| PCLNR/L1616H12   |                                                                                   | ○     | ○ | 16              | 16 | 100 | 16 | 20 | 20 | CN**1204**                                                                          |
| PCLNR/L2020K12   |                                                                                   | ●     | ● | 20              | 20 | 125 | 20 | 25 | 28 | CN**1204**                                                                          |
| PCLNR/L2525M12   |                                                                                   | ●     | ● | 25              | 25 | 150 | 25 | 32 | 28 | CN**1204**                                                                          |
| PCLNR/L3232P12   |                                                                                   | ●     | ● | 32              | 32 | 170 | 32 | 40 | 28 | CN**1204**                                                                          |
| PCLNR/L2525M16   |                                                                                   | ●     | ● | 25              | 25 | 150 | 25 | 32 | 33 | CN**1606**                                                                          |
| PCLNR/L3232P16   |                                                                                   | ●     | ● | 32              | 32 | 170 | 32 | 40 | 33 | CN**1606**                                                                          |
| PCLNR/L3232P19   |                                                                                   | ●     | ● | 32              | 32 | 170 | 32 | 40 | 38 | CN**1906**                                                                          |
| PCLNR/L4040S19   |                                                                                   | ●     | ● | 40              | 40 | 250 | 40 | 50 | 38 | CN**1906**                                                                          |
| PCLNR/L4040S2507 |                                                                                   | ●     | ● | 40              | 40 | 250 | 40 | 50 | 49 | CN**2507**                                                                          |
| PCLNR/L4040S2509 |                                                                                   | ●     | ● | 40              | 40 | 250 | 40 | 50 | 49 | CN**2509**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

#### Parti di ricambio

|  | Inserto                      | CN**0903**             | CN**1204**           | CN**1606**           | CN**1906**            | CN**2507**             | CN**2509**             |
|--|------------------------------|------------------------|----------------------|----------------------|-----------------------|------------------------|------------------------|
|  | h                            | 16-25                  | 16-32                | 25-32                | 32-40                 | 40                     | 40                     |
|  | Leva di fissaggio            | L3                     | L4                   | L5                   | L6                    | L8                     | L8                     |
|  | Vite                         |                        | LEM8x21<br>(10,2 Nm) | LEM8x25<br>(10,2 Nm) | LEM10x27<br>(16,6 Nm) |                        |                        |
|  | Vite                         | LEM6x13,4A<br>(7,0 Nm) |                      |                      |                       | LEM12x36A<br>(25,2 Nm) | LEM12x36A<br>(25,2 Nm) |
|  | Sottopiacchetta              | C09AP                  | C12AP                | C16AP                | C19AP                 | C25AP-07               | C25AP                  |
|  | Perno dist (sottopiacchetta) | SP10                   | SP4                  | SP5                  | SP6                   | SP8                    | SP8                    |
|  | Chiave                       | WH25L                  | WH30L                | WH30L                | WH40L                 | WH50L                  | WH50L                  |

## CN\*\* Portautensile (esterno)

| Inserto                                                                           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Raschiante                                                                        | Finitura                                                                          | Media Lavor.                                                                      | Sgrossatura                                                                       | Lavor.- ghisa grigia                                                              | PCBN/PCD                                                                            |
| A51                                                                               | A52                                                                               | A53                                                                               | A57                                                                               | A61                                                                               | A177                                                                                |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni  
tecniche

E

Indice

Codice sistema &gt; A228

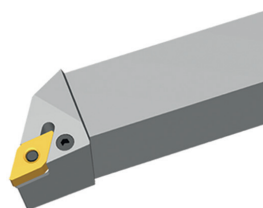
Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

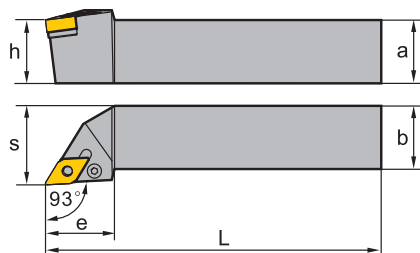
Dati di taglio &gt; A366

## DN\*\* Portautensile (esterno) P-Bloccaggio

PDJNR/L Kr: 93°



Versione destra



| Articolo         | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|------------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                  |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| PDJNR/L1616H11   | ● | ●     |   | 16              | 16 | 100 | 16 | 20 | 25 | DN**1104** |
| PDJNR/L2020K11   | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 25 | DN**1104** |
| PDJNR/L2525M11   | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 30 | DN**1104** |
| PDJNR/L2020K15-3 | ● | ○     |   | 20              | 20 | 125 | 20 | 25 | 35 | DN**1504** |
| PDJNR/L2525M15-3 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 35 | DN**1504** |
| PDJNR/L3232P15-3 | ● | ●     |   | 32              | 32 | 170 | 32 | 40 | 35 | DN**1504** |
| PDJNR/L2020K15   | ● | ○     |   | 20              | 20 | 125 | 20 | 25 | 35 | DN**1506** |
| PDJNR/L2525M15   | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 35 | DN**1506** |
| PDJNR/L3232P15   | ● | ●     |   | 32              | 32 | 170 | 32 | 40 | 35 | DN**1506** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                              |                        |                      |                      |
|-------------------|------------------------------|------------------------|----------------------|----------------------|
|                   | Inserto                      | DN**1104**             | DN**1504**           | DN**1506**           |
|                   | h                            | 16-32                  | 20-32                | 20-32                |
|                   | Leva di fissaggio            | L3                     | L4                   | L4B                  |
|                   | Vite                         |                        | LEM8x21<br>(10,2 Nm) | LEM8x21<br>(10,2 Nm) |
|                   | Vite                         | LEM6x13,4A<br>(7,0 Nm) |                      |                      |
|                   | Sottopiacchetta              | D11AP                  | D15AP                | D15AP                |
|                   | Perno dist (sottopiacchetta) | SP3                    | SP4                  | SP4                  |
|                   | Chiave                       | WH25L                  | WH30L                | WH30L                |

| Inserto    |          |              |             |                      |          |
|------------|----------|--------------|-------------|----------------------|----------|
|            |          |              |             |                      |          |
| Raschiante | Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A62        | A63      | A63          | A68         | A69                  | A178     |

Codice sistema > A228

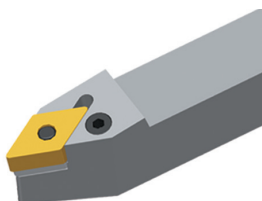
Scelta gradi > A42

Informazioni tecniche > A501

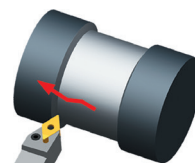
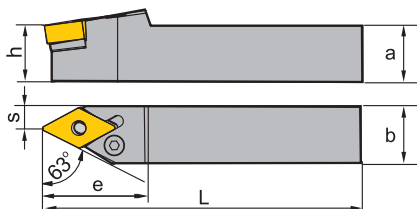
Dati di taglio > A366

## DN\*\* Portautensile (esterno) P-Bloccaggio

PDNNR/L Kr: 63°



Versione sinistra



| Articolo         | * | Stock |   | Dimensioni [mm] |    |     |    |      |    | Inserto    |
|------------------|---|-------|---|-----------------|----|-----|----|------|----|------------|
|                  |   | R     | L | a               | b  | L   | h  | s    | e  |            |
| PDNNR/L2020K15-3 | ● | ○     |   | 20              | 20 | 125 | 20 | 8    | 37 | DN**1504** |
| PDNNR/L2525M15-3 | ● | ○     |   | 25              | 25 | 150 | 25 | 12,5 | 37 | DN**1504** |
| PDNNR/L3232P15-3 | ● | ●     |   | 32              | 32 | 170 | 32 | 16   | 37 | DN**1504** |
| PDNNR/L2020K15   | ● | ●     |   | 20              | 20 | 125 | 20 | 8    | 37 | DN**1506** |
| PDNNR/L2525M15   | ● | ●     |   | 25              | 25 | 150 | 25 | 12,5 | 37 | DN**1506** |
| PDNNR/L3232P15   | ● | ●     |   | 32              | 32 | 170 | 32 | 16   | 37 | DN**1506** |

● In magazzino ○ Su richiesta

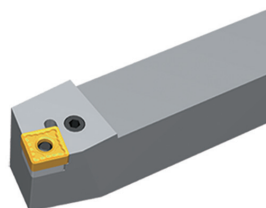
\* Con raffreddamento interno

| Parti di ricambio |                              |                      |                      |
|-------------------|------------------------------|----------------------|----------------------|
|                   | Inserto                      | DN**1504**           | DN**1506**           |
|                   | h                            | 20-32                | 20-32                |
|                   | Leva di fissaggio            | L4                   | L4B                  |
|                   | Vite                         | LEM8x21<br>(10,2 Nm) | LEM8x21<br>(10,2 Nm) |
|                   | Sottopiacchetta              | D15AP                | D15AP                |
|                   | Perno dist (sottopiacchetta) | SP4                  | SP4                  |
|                   | Chiave                       | WH30L                | WH30L                |

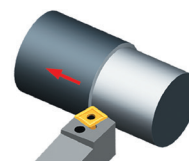
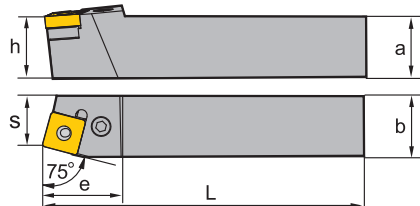
| Inserto    |          |              |             |                      |          |
|------------|----------|--------------|-------------|----------------------|----------|
|            |          |              |             |                      |          |
| Raschiante | Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A62        | A63      | A63          | A68         | A69                  | A178     |

## SN\*\* Portautensile (esterno) P-Bloccaggio

PSBNR/L Kr: 75°



Versione destra



| Articolo         | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|------------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                  |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| PSBNR/L1616H09   | ● | ○     |   | 16              | 16 | 100 | 16 | 13 | 21 | SN**0903** |
| PSBNR/L2020K09   | ● | ○     |   | 20              | 20 | 125 | 20 | 17 | 23 | SN**0903** |
| PSBNR/L2020K12   | ● | ●     |   | 20              | 20 | 125 | 20 | 17 | 28 | SN**1204** |
| PSBNR/L2525M12   | ● | ●     |   | 25              | 25 | 125 | 25 | 22 | 28 | SN**1204** |
| PSBNR/L3225P12   | ● | ○     |   | 32              | 25 | 170 | 32 | 22 | 28 | SN**1204** |
| PSBNR/L3232P12   | ● | ○     |   | 32              | 32 | 170 | 32 | 27 | 28 | SN**1204** |
| PSBNR/L2525M15   | ● | ○     |   | 25              | 25 | 150 | 25 | 22 | 35 | SN**1506** |
| PSBNR/L3232P15   | ● | ●     |   | 32              | 32 | 170 | 32 | 27 | 35 | SN**1506** |
| PSBNR/L3232P19   | ● | ●     |   | 32              | 32 | 170 | 32 | 27 | 40 | SN**1906** |
| PSBNR/L4040S19   | ● | ●     |   | 40              | 40 | 250 | 40 | 35 | 40 | SN**1906** |
| PSBNR/L4040S2507 | ○ | ○     |   | 40              | 40 | 250 | 40 | 35 | 48 | SN**2507** |
| PSBNR/L4040S2509 | ○ | ○     |   | 40              | 40 | 250 | 40 | 35 | 48 | SN**2509** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                              |                        |                      |                      |                       |                        |                        |
|-------------------|------------------------------|------------------------|----------------------|----------------------|-----------------------|------------------------|------------------------|
|                   | Inserto                      | SN**0903**             | SN**1204**           | SN**1506**           | SN**1906**            | SN**2507**             | SN**2509**             |
|                   | h                            | 16-20                  | 20-32                | 25-32                | 32-40                 | 40                     | 40                     |
|                   | Leva di fissaggio            | L3                     | L4                   | L5                   | L6                    | L8                     | L8                     |
|                   | Vite                         |                        | LEM8×21<br>(10,2 Nm) | LEM8×25<br>(10,2 Nm) | LEM10×27<br>(16,6 Nm) |                        |                        |
|                   | Vite                         | LEM6×13,4A<br>(7,0 Nm) |                      |                      |                       | LEM12×36A<br>(25,2 Nm) | LEM12×36A<br>(25,2 Nm) |
|                   | Sottopiacchetta              | S09AP                  | S12AP                | S15AP                | S19AP                 | S25AP                  |                        |
|                   | Sottopiacchetta              |                        |                      |                      |                       |                        | S25AP-09               |
|                   | Perno dist (sottopiacchetta) | SP10                   | SP4                  | SP5                  | SP6                   | SP8                    | SP8                    |
|                   | Chiave                       | WH25L                  | WH30L                | WH30L                | WH40L                 | WH50L                  | WH50L                  |

## SN\*\* Portautensile (esterno)

| Inserto                                                                           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |  |  |
| Finitura                                                                          | Media Lavor.                                                                      | Sgrossatura                                                                       | Lavor.- ghisa grigia                                                              | PCBN/PCD                                                                          |
| A73                                                                               | A73                                                                               | A78                                                                               | A84                                                                               | A162                                                                              |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni  
tecniche

E

Indice

Codice sistema &gt; A228

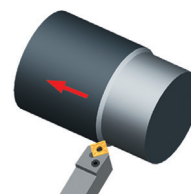
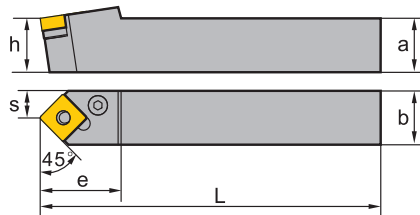
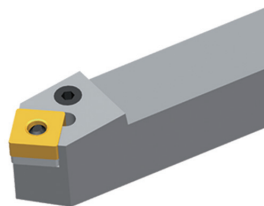
Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

Dati di taglio &gt; A366

## SN\*\* Portautensile (esterno) P-Bloccaggio

PSDNN Kr: 45°



| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |      |    | Inserto    |
|--------------|---|-------|-----------------|----|-----|----|------|----|------------|
|              |   |       | a               | b  | L   | h  | s    | e  |            |
| PSDNN1212F09 | ○ |       | 12              | 12 | 80  | 12 | 6    | 21 | SN**0903** |
| PSDNN1616H09 | ● |       | 16              | 16 | 100 | 16 | 8    | 23 | SN**0903** |
| PSDNN2020K12 | ● |       | 20              | 20 | 125 | 20 | 10   | 30 | SN**1204** |
| PSDNN2525M12 | ● |       | 20              | 20 | 150 | 20 | 12,5 | 30 | SN**1204** |
| PSDNN3232P12 | ● |       | 32              | 32 | 170 | 32 | 16   | 40 | SN**1204** |
| PSDNN2525M15 | ● |       | 25              | 25 | 150 | 25 | 12,5 | 40 | SN**1506** |
| PSDNN3232P15 | ● |       | 32              | 32 | 170 | 32 | 16   | 40 | SN**1506** |
| PSDNN3232P19 | ● |       | 32              | 32 | 170 | 32 | 16   | 40 | SN**1906** |
| PSDNN4040S19 | ● |       | 40              | 40 | 250 | 40 | 20   | 40 | SN**1906** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                              |                      |                        |                        |                      |                       |
|-------------------|------------------------------|----------------------|------------------------|------------------------|----------------------|-----------------------|
|                   | Inserto                      | SN**0903**           | SN**0903**             | SN**1204**             | SN**1506**           | SN**1906**            |
|                   | h                            | 12                   | 16                     | 20-32                  | 25-32                | 32-40                 |
|                   | Leva di fissaggio            | L3B                  | L3                     | L3                     | L5                   | L6                    |
|                   | Vite                         | LEM5×12B<br>(4,0 Nm) |                        |                        |                      |                       |
|                   | Vite                         |                      |                        |                        | LEM8×25<br>(10,2 Nm) | LEM10×27<br>(16,6 Nm) |
|                   | Vite                         |                      | LEM6×13,4A<br>(7,0 Nm) | LEM6×13,4A<br>(7,0 Nm) |                      |                       |
|                   | Sottopiacchetta              |                      | S09AP                  | S12AP                  | S15AP                | S19AP                 |
|                   | Perno dist (sottopiacchetta) |                      | SP10                   | SP10                   | SP5                  | SP6                   |
|                   | Chiave                       |                      | WH25L                  | WH25L                  | WH30L                | WH40L                 |
|                   | Chiave                       | WT09IP               |                        |                        |                      |                       |

| Inserto  |              |             |                     |          |
|----------|--------------|-------------|---------------------|----------|
|          |              |             |                     |          |
| Finitura | Media Lavor. | Sgrossatura | Lavor- ghisa grigia | PCBN/PCD |
| A73      | A73          | A78         | A84                 | A162     |

Codice sistema > A228

Scelta gradi > A42

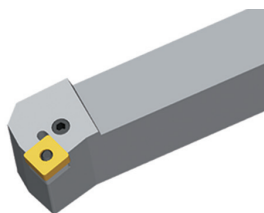
Informazioni tecniche > A501

Dati di taglio > A366

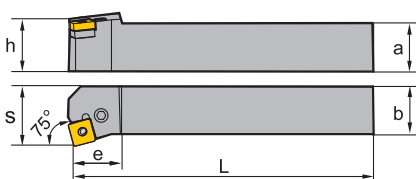


**SN\*\* Portautensile (esterno) P-Bloccaggio**

PSKNR/L Kr: 75°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| PSKNR/L1616H09 |   | ○     | ○ | 16              | 16 | 100 | 16 | 20 | 17 | SN**0903** |
| PSKNR/L2020K09 |   | ●     | ○ | 20              | 20 | 125 | 20 | 25 | 20 | SN**0903** |
| PSKNR/L2020K12 |   | ●     | ● | 20              | 20 | 125 | 20 | 25 | 26 | SN**1204** |
| PSKNR/L2525M12 |   | ●     | ● | 25              | 25 | 150 | 25 | 32 | 26 | SN**1204** |
| PSKNR/L3232P12 |   | ●     | ● | 32              | 32 | 170 | 32 | 40 | 26 | SN**1204** |
| PSKNR/L2525M15 |   | ●     | ○ | 25              | 25 | 150 | 25 | 32 | 32 | SN**1506** |
| PSKNR/L3232P15 |   | ●     | ● | 32              | 32 | 170 | 32 | 40 | 32 | SN**1506** |
| PSKNR/L3232P19 |   | ●     | ● | 32              | 32 | 170 | 32 | 40 | 36 | SN**1906** |
| PSKNR/L4040S19 |   | ○     | ○ | 40              | 40 | 250 | 40 | 50 | 40 | SN**1906** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                              |                        |                      |                      |                       |
|-------------------|------------------------------|------------------------|----------------------|----------------------|-----------------------|
|                   | Inserto                      | SN**0903**             | SN**1204**           | SN**1506**           | SN**1906**            |
|                   | h                            | 16-20                  | 20-32                | 25-32                | 32-40                 |
|                   | Leva di fissaggio            | L3                     | L4                   | L5                   | L6                    |
|                   | Vite                         |                        | LEM8x21<br>(10,2 Nm) | LEM8x25<br>(10,2 Nm) | LEM10x27<br>(16,6 Nm) |
|                   | Vite                         | LEM6x13,4A<br>(7,0 Nm) |                      |                      |                       |
|                   | Sottopiacchetta              | S09AP                  | S12AP                | S15AP                | S19AP                 |
|                   | Perno dist (sottopiacchetta) | SP10                   | SP4                  | SP5                  | SP6                   |
|                   | Chiave                       | WH25L                  | WH30L                | WH30L                | WH40L                 |

| Inserto         |                     |                    |                             |                  |
|-----------------|---------------------|--------------------|-----------------------------|------------------|
|                 |                     |                    |                             |                  |
| Finitura<br>A73 | Media Lavor.<br>A73 | Sgrossatura<br>A78 | Lavor.- ghisa grigia<br>A84 | PCBN/PCD<br>A162 |

Codice sistema &gt; A228

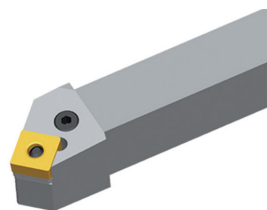
Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

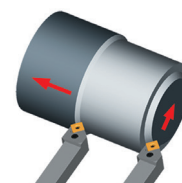
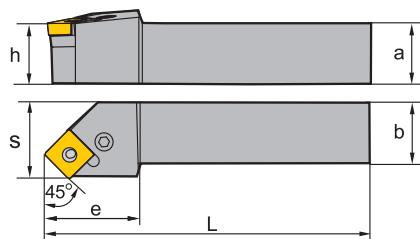
Dati di taglio &gt; A366

## SN\*\* Portautensile (esterno) **P-Bloccaggio**

PSSNR/L Kr: 45°



Versione destra



| Articolo         | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|------------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                  |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| PSSNR/L1616H09   | ● | ●     |   | 16              | 16 | 100 | 16 | 20 | 25 | SN**0903** |
| PSSNR/L2020K12   | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 30 | SN**1204** |
| PSSNR/L2525M12   | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 30 | SN**1204** |
| PSSNR/L3232P12   | ● | ●     |   | 32              | 32 | 170 | 32 | 40 | 40 | SN**1204** |
| PSSNR/L2525M15   | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 30 | SN**1506** |
| PSSNR/L3232P15   | ● | ●     |   | 32              | 32 | 170 | 32 | 40 | 40 | SN**1506** |
| PSSNR/L3232P19   | ● | ●     |   | 32              | 32 | 170 | 32 | 40 | 40 | SN**1906** |
| PSSNR/L4040S19   | ● | ●     |   | 40              | 40 | 250 | 40 | 50 | 50 | SN**1906** |
| PSSNR/L4040S2507 | ● | ●     |   | 40              | 40 | 250 | 40 | 50 | 50 | SN**2507** |
| PSSNR/L4040S2509 | ● | ●     |   | 40              | 40 | 250 | 40 | 50 | 50 | SN**2509** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                              |                        |                      |                      |                       |                        |                        |
|-------------------|------------------------------|------------------------|----------------------|----------------------|-----------------------|------------------------|------------------------|
|                   | Inserto                      | SN**0903**             | SN**1204**           | SN**1506**           | SN**1906**            | SN**2507**             | SN**2509**             |
|                   | h                            | 16                     | 20-32                | 25-32                | 32-40                 | 40                     | 40                     |
|                   | Leva di fissaggio            | L3                     | L4                   | L5                   | L6                    | L8                     | L8                     |
|                   | Vite                         |                        | LEM8x21<br>(10,2 Nm) | LEM8x25<br>(10,2 Nm) | LEM10x27<br>(16,6 Nm) |                        |                        |
|                   | Vite                         | LEM6x13,4A<br>(7,0 Nm) |                      |                      |                       | LEM12x36A<br>(25,2 Nm) | LEM12x36A<br>(25,2 Nm) |
|                   | Sottopiacchetta              | S09AP                  | S12AP                | S15AP                | S19AP                 | S25AP                  |                        |
|                   | Sottopiacchetta              |                        |                      |                      |                       |                        | S25AP-09               |
|                   | Perno dist (sottopiacchetta) | SP10                   | SP4                  | SP5                  | SP6                   | SP8                    | SP8                    |
|                   | Chiave                       | WH25L                  | WH30L                | WH30L                | WH40L                 | WH50L                  | WH50L                  |

| Inserto         |                     |                    |                            |                 |
|-----------------|---------------------|--------------------|----------------------------|-----------------|
|                 |                     |                    |                            |                 |
| <b>Finitura</b> | <b>Media Lavor.</b> | <b>Sgrossatura</b> | <b>Lavor- ghisa grigia</b> | <b>PCBN/PCD</b> |
| A73             | A73                 | A78                | A84                        | A162            |

Codice sistema > A228

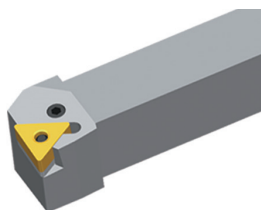
Scelta gradi > A42

Informazioni tecniche > A501

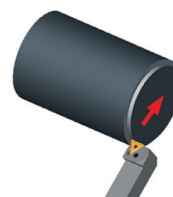
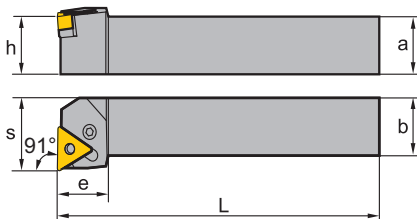
Dati di taglio > A366

**TN\*\* Portautensile (esterno) P-Bloccaggio**

PTFNR/L Kr: 91°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto                                                                             |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|-------------------------------------------------------------------------------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |  |
| PTFNR/L1616H16 |   | ●     | ● | 16              | 16 | 100 | 16 | 20 | 20 | TN**1604**                                                                          |
| PTFNR/L2020K16 |   | ●     | ● | 20              | 20 | 125 | 20 | 25 | 20 | TN**1604**                                                                          |
| PTFNR/L2525M16 |   | ●     | ● | 25              | 25 | 150 | 25 | 32 | 20 | TN**1604**                                                                          |
| PTFNR/L2525M22 |   | ●     | ● | 25              | 25 | 150 | 25 | 32 | 25 | TN**2204**                                                                          |
| PTFNR/L3232P22 |   | ●     | ● | 32              | 32 | 170 | 32 | 40 | 25 | TN**2204**                                                                          |
| PTFNR/L3232P27 |   | ●     | ○ | 32              | 32 | 170 | 32 | 40 | 34 | TN**2706**                                                                          |
| PTFNR/L4040S27 |   | ○     | ○ | 40              | 40 | 250 | 40 | 50 | 34 | TN**2706**                                                                          |

● In magazzino ○ Su richiesta

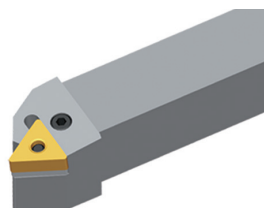
\* Con raffreddamento interno

| Parti di ricambio                                                                   |                              |                        |                      |                      |
|-------------------------------------------------------------------------------------|------------------------------|------------------------|----------------------|----------------------|
|                                                                                     | Inserto                      | TN**1604**             | TN**2204**           | TN**2706**           |
|                                                                                     | h                            | 16-25                  | 25-32                | 32-40                |
|  | Leva di fissaggio            | L3                     | L4                   | L5                   |
|  | Vite                         |                        | LEM8x21<br>(10,2 Nm) | LEM8x25<br>(10,2 Nm) |
|  | Vite                         | LEM6x13,4A<br>(7,0 Nm) |                      |                      |
|  | Sottopiacchetta              | T16AP                  | T22AP                | T27AP                |
|  | Perno dist (sottopiacchetta) | SP3                    | SP4                  | SP5                  |
|  | Chiave                       | WH25L                  | WH30L                | WH30L                |

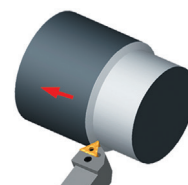
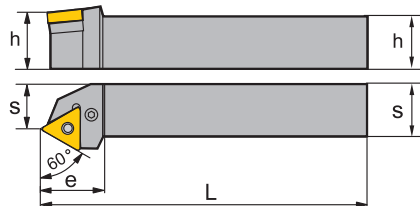
| Inserto                                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| Raschiante                                                                          | Finitura                                                                            | Media Lavor.                                                                        | Sgrossatura                                                                         | Alta asp.                                                                           | Lavor- ghisa grigia                                                                   | PCBN/PCD                                                                              |
| A87                                                                                 | A88                                                                                 | A90                                                                                 | A92                                                                                 | A97                                                                                 | A99                                                                                   | A163                                                                                  |

## TN\*\* Portautensile (esterno) P-Bloccaggio

PTTNR/L Kr: 60°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| PTTNR/L1616H16 | ● |       |   | 16              | 16 | 100 | 16 | 13 | 25 | TN**1604** |
| PTTNR/L2020K16 | ● | ○     |   | 20              | 20 | 125 | 20 | 17 | 25 | TN**1604** |
| PTTNR/L2525M22 | ● | ●     |   | 25              | 25 | 150 | 20 | 22 | 32 | TN**2204** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|  | Inserto                      | TN**1604**             | TN**2204**           |
|--|------------------------------|------------------------|----------------------|
|  | h                            | 16-25                  | 20                   |
|  | Leva di fissaggio            | L3                     | L4                   |
|  | Vite                         |                        | LEM8x21<br>(10,2 Nm) |
|  | Vite                         | LEM6x13,4A<br>(7,0 Nm) |                      |
|  | Sottopiacchetta              | T16AP                  | T22AP                |
|  | Perno dist (sottopiacchetta) | SP3                    | SP4                  |
|  | Chiave                       | WH25L                  | WH30L                |

### Inserto

|            |          |              |             |           |                      |          |
|------------|----------|--------------|-------------|-----------|----------------------|----------|
|            |          |              |             |           |                      |          |
| Raschiante | Finitura | Media Lavor. | Sgrossatura | Alta asp. | Lavor.- ghisa grigia | PCBN/PCD |
| A87        | A88      | A90          | A92         | A97       | A99                  | A163     |

Codice sistema > A228

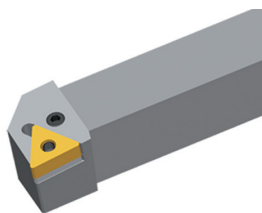
Scelta gradi > A42

Informazioni tecniche > A501

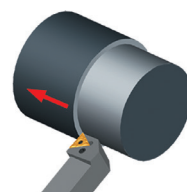
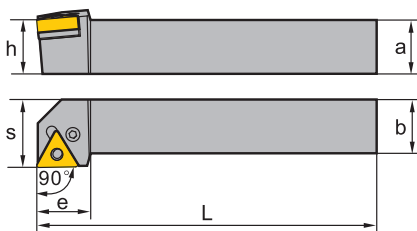
Dati di taglio > A366

## TN\*\* Portautensile (esterno) P-Bloccaggio

PTGNR/L Kr: 90°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| PTGNR/L1010E11 | ● |       |   | 10              | 10 | 70  | 10 | 14 | 16 | TN**1103** |
| PTGNR/L1212F11 | ● | ●     |   | 12              | 12 | 80  | 12 | 16 | 14 | TN**1103** |
| PTGNR/L1616H11 | ● |       |   | 16              | 16 | 100 | 16 | 20 | 18 | TN**1103** |
| PTGNR/L2020K11 | ● | ○     |   | 20              | 20 | 125 | 20 | 25 | 19 | TN**1103** |
| PTGNR/L2525M11 | ○ | ○     |   | 25              | 25 | 150 | 25 | 32 | 20 | TN**1103** |
| PTGNR/L1616H16 | ● | ●     |   | 16              | 16 | 100 | 16 | 20 | 20 | TN**1604** |
| PTGNR/L2020K16 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 20 | TN**1604** |
| PTGNR/L2525M16 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 20 | TN**1604** |
| PTGNR/L3232P16 | ● | ○     |   | 32              | 32 | 170 | 32 | 40 | 20 | TN**1604** |
| PTGNR/L2525M22 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 28 | TN**2204** |
| PTGNR/L3232P22 | ● | ●     |   | 32              | 32 | 170 | 32 | 40 | 28 | TN**2204** |
| PTGNR/L3232P27 | ● | ○     |   | 32              | 32 | 170 | 32 | 40 | 33 | TN**2706** |
| PTGNR/L4040S27 | ○ | ○     |   | 40              | 40 | 250 | 40 | 50 | 33 | TN**2706** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|  | Inserto                      | TN**1103**          | TN**1604**             | TN**2204**           | TN**2706**           |
|--|------------------------------|---------------------|------------------------|----------------------|----------------------|
|  | h                            | 10-25               | 16-32                  | 25-32                | 32-40                |
|  | Leva di fissaggio            | L2                  | L3                     | L4                   | L5                   |
|  | Vite                         | LEM5×9B<br>(4,0 Nm) |                        |                      |                      |
|  | Vite                         |                     |                        | LEM8×21<br>(10,2 Nm) | LEM8×25<br>(10,2 Nm) |
|  | Vite                         |                     | LEM6×13,4A<br>(7,0 Nm) |                      |                      |
|  | Sottopiacchetta              |                     | T16AP                  | T22AP                | T27AP                |
|  | Perno dist (sottopiacchetta) |                     | SP3                    | SP4                  | SP5                  |
|  | Chiave                       |                     | WH25L                  | WH30L                | WH30L                |
|  | Chiave                       | WT09IP              |                        |                      |                      |

A

Tornitura

TN\*\* Portautensile (esterno)

| Inserto                                                                           |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| Raschiante                                                                        | Finitura                                                                          | Media Lavor.                                                                      | Sgrossatura                                                                       | Alta asp.                                                                          | Lavor.- ghisa grigia                                                                | PCBN/PCD                                                                            |
| A87                                                                               | A88                                                                               | A90                                                                               | A92                                                                               | A97                                                                                | A99                                                                                 | A163                                                                                |

B

Fresatura

C

Foratura

D

Informazioni  
tecniche

E

Indice

Codice sistema > A228

Scelta gradi > A42

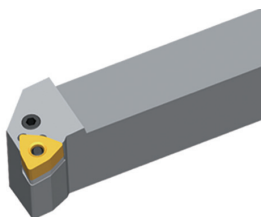
Informazioni tecniche > A501

Dati di taglio > A366

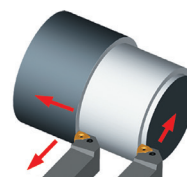
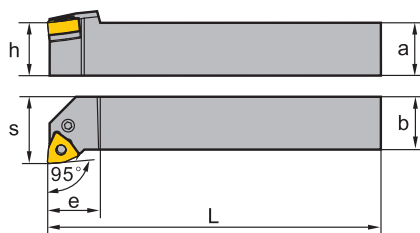
## WN\*\* Portautensile (esterno)

## P-Bloccaggio

PWLNR/L Kr: 95°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto                                                                             |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|-------------------------------------------------------------------------------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |  |
| PWLNR/L1616H06 |   | ●     | ● | 16              | 16 | 100 | 16 | 20 | 20 | WN**0604**                                                                          |
| PWLNR/L2020K06 |   | ●     | ● | 20              | 20 | 125 | 20 | 25 | 20 | WN**0604**                                                                          |
| PWLNR/L2525M06 |   | ●     | ● | 25              | 25 | 150 | 25 | 32 | 20 | WN**0604**                                                                          |
| PWLNR/L2020K08 |   | ●     | ● | 20              | 20 | 125 | 20 | 25 | 26 | WN**0804**                                                                          |
| PWLNR/L2525M08 |   | ●     | ● | 25              | 25 | 150 | 25 | 32 | 26 | WN**0804**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|                                                                                     | Inserto                      | WN**0604**             | WN**0804**           |
|-------------------------------------------------------------------------------------|------------------------------|------------------------|----------------------|
|                                                                                     | h                            | 16-25                  | 20-25                |
|  | Leva di fissaggio            | L3                     | L4                   |
|  | Vite                         |                        | LEM8x21<br>(10,2 Nm) |
|  | Vite                         | LEM6x13,4A<br>(7,0 Nm) |                      |
|  | Sottopiacchetta              | W06AP                  | W08AP                |
|  | Perno dist (sottopiacchetta) | SP3                    | SP4                  |
|  | Chiave                       | WH25L                  | WH30L                |

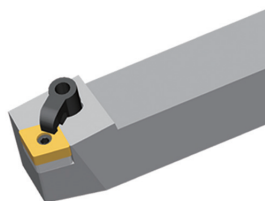
## Inserto

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Raschiante                                                                          | Finitura                                                                            | Media Lavor.                                                                        | Sgrossatura                                                                         | Lavor.- ghisa grigia                                                                | PCBN/PCD                                                                              |
| A106                                                                                | A107                                                                                | A107                                                                                | A109                                                                                | A111                                                                                | A165                                                                                  |

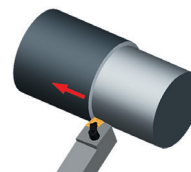
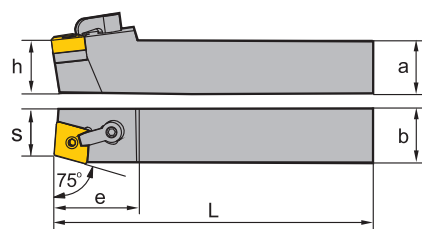
## CN\*\* Portautensile (esterno)

### M-Bloccaggio

MCBNR/L Kr: 75°



Versione destra



| Articolo       | *   | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|-----|-------|---|-----------------|----|-----|----|----|----|------------|
|                |     | R     | L | a               | b  | L   | h  | s  | e  |            |
| MCBNR/L2020K12 | ● ○ |       |   | 20              | 20 | 125 | 20 | 17 | 32 | CN**1204** |
| MCBNR/L2525M12 | ● ● |       |   | 25              | 25 | 150 | 20 | 22 | 32 | CN**1204** |
| MCBNR/L3225P12 | ● ● |       |   | 32              | 25 | 170 | 32 | 22 | 32 | CN**1204** |
| MCBNR/L2525M16 | ○ ○ |       |   | 25              | 25 | 150 | 25 | 22 | 40 | CN**1606** |
| MCBNR/L3232P16 | ● ● |       |   | 32              | 32 | 170 | 32 | 27 | 40 | CN**1606** |
| MCBNR/L3232P19 | ○ ○ |       |   | 32              | 32 | 170 | 32 | 27 | 45 | CN**1906** |
| MCBNR/L4040R19 | ○ ● |       |   | 40              | 40 | 200 | 40 | 35 | 45 | CN**1906** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                         |                    |                    |                    |                      |
|-------------------|-------------------------|--------------------|--------------------|--------------------|----------------------|
|                   | Inserto                 | CN**1204**         | CN**1204**         | CN**1606**         | CN**1906**           |
|                   | h                       | 20                 | 25-32              | 25-32              | 32-40                |
|                   | Staffa                  | C1RD               | C1RD               | C2RD               | C5RD                 |
|                   | Perno passante          | TM6x17             | TM6x17             | TM8x21             | TM10x21              |
|                   | Vite (staffa)           | DM6x25<br>(7,0 Nm) | DM6x30<br>(7,0 Nm) | DM6x30<br>(7,0 Nm) |                      |
|                   | Vite (staffa)           |                    |                    |                    | DM8x30X<br>(10,2 Nm) |
|                   | Sottopiacchetta         | C12BM              | C12BM              | C16BM              | C19BM                |
|                   | Chiave (perno passante) | WH30L              | WH30L              | WH30L              | WH40L                |
|                   | Chiave (staffa)         | WH30L              | WH30L              | WH30L              | WH40L                |

| Inserto    |          |              |             |                      |          |
|------------|----------|--------------|-------------|----------------------|----------|
|            |          |              |             |                      |          |
| Raschiante | Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A51        | A52      | A53          | A57         | A61                  | A177     |

Codice sistema > A228

Scelta gradi > A42

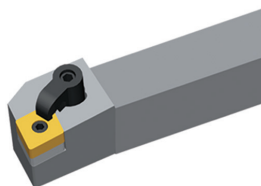
Informazioni tecniche > A501

Dati di taglio > A366

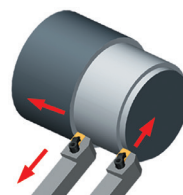
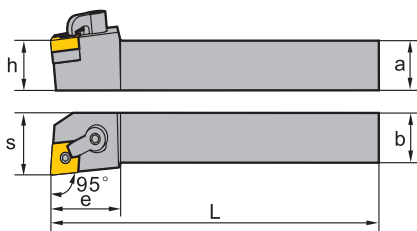


## CN\*\* Portautensile (esterno) M-Bloccaggio

MCLNR/L Kr: 95°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| MCLNR/L2020K12 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 32 | CN**1204** |
| MCLNR/L2525M12 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 32 | CN**1204** |
| MCLNR/L3225P12 | ● | ●     |   | 32              | 25 | 170 | 32 | 32 | 32 | CN**1204** |
| MCLNR/L2525M16 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 38 | CN**1606** |
| MCLNR/L3232P16 | ● | ●     |   | 32              | 32 | 170 | 32 | 40 | 38 | CN**1606** |
| MCLNR/L3232P19 | ● | ●     |   | 32              | 32 | 170 | 32 | 40 | 45 | CN**1906** |
| MCLNR/L4040R19 | ● | ○     |   | 40              | 40 | 200 | 40 | 50 | 45 | CN**1906** |
| MCLNR/L4040S25 | ○ | ○     |   | 40              | 40 | 250 | 40 | 50 | 38 | CN**2509** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                         |                    |                    |                    |                      |                       |
|-------------------|-------------------------|--------------------|--------------------|--------------------|----------------------|-----------------------|
|                   | Inserto                 | CN**1204**         | CN**1204**         | CN**1606**         | CN**1906**           | CN**2509**            |
|                   | h                       | 20                 | 25-32              | 25-32              | 32-40                | 40                    |
|                   | Staffa                  | C1RD               | C1RD               | C2RD               | C5RD                 | C6RD                  |
|                   | Perno passante          | TM6×17             | TM6×17             | TM8×21             | TM10×21              | TM12×29<br>(25,2 Nm)  |
|                   | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) |                      |                       |
|                   | Vite (staffa)           |                    |                    |                    | DM8×30X<br>(10,2 Nm) | DM10×35X<br>(16,6 Nm) |
|                   | Sottopiacchetta         | C12BM              | C12BM              | C16BM              | C19BM                |                       |
|                   | Sottopiacchetta         |                    |                    |                    |                      | C25BM-09              |
|                   | Chiave (staffa)         | WH30L              | WH30L              | WH30L              | WH40L                | WH50L                 |
|                   | Chiave (perno passante) | WH30L              | WH30L              | WH30L              | WH40L                | WH40L                 |

| Inserto    |          |              |             |                      |          |
|------------|----------|--------------|-------------|----------------------|----------|
|            |          |              |             |                      |          |
| Raschiante | Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A51        | A52      | A53          | A57         | A61                  | A177     |

Codice sistema &gt; A228

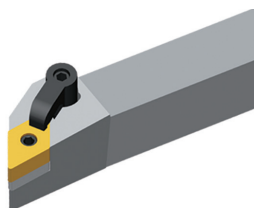
Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

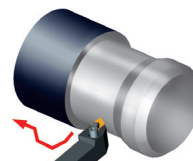
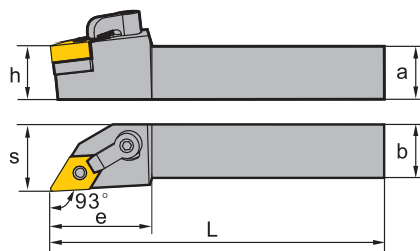
Dati di taglio &gt; A366

## DN\*\* Portautensile (esterno) M-Bloccaggio

MDJNR/L Kr: 93°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| MDJNR/L2020K11 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 32 | DN**1104** |
| MDJNR/L2525M11 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 32 | DN**1104** |
| MDJNR/L3225P11 | ● | ○     |   | 32              | 25 | 170 | 32 | 32 | 32 | DN**1104** |
| MDJNR/L2020K15 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 38 | DN**1506** |
| MDJNR/L2525M15 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 38 | DN**1506** |
| MDJNR/L3225P15 | ● | ●     |   | 32              | 25 | 170 | 32 | 32 | 38 | DN**1506** |

● In magazzino ○ Su richiesta

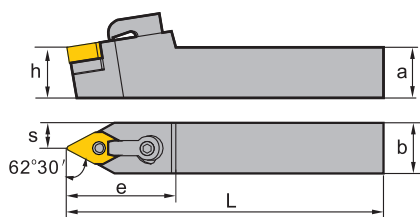
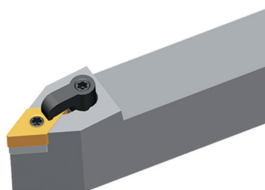
\* Con raffreddamento interno

| Parti di ricambio |                         |                    |                    |                    |                    |
|-------------------|-------------------------|--------------------|--------------------|--------------------|--------------------|
|                   | Inserto                 | DN**1104**         | DN**1104**         | DN**1506**         | DN**1506**         |
|                   | h                       | 20                 | 25-32              | 20                 | 25-32              |
|                   | Staffa                  | C1RD               | C1RD               | C2RD               | C2RD               |
|                   | Perno passante          | TM5×13             | TM5×13             | TM6×19             | TM6×19             |
|                   | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) |
|                   | Sottopiacchetta         | D11BM              | D11BM              | D15BM              | D15BM              |
|                   | Chiave (staffa)         | WH30L              | WH30L              | WH30L              | WH30L              |
|                   | Chiave (perno passante) | WH20L              | WH20L              | WH30L              | WH30L              |

| Inserto    |          |              |             |                      |          |
|------------|----------|--------------|-------------|----------------------|----------|
|            |          |              |             |                      |          |
| Raschiante | Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A62        | A63      | A63          | A68         | A69                  | A178     |

## DN\*\* Portautensile (esterno) M-Bloccaggio

MDPNN Kr: 62°30'



| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |      |    | Inserto                                                                             |
|--------------|---|-------|-----------------|----|-----|----|------|----|-------------------------------------------------------------------------------------|
|              |   |       | a               | b  | L   | h  | s    | e  |  |
| MDPNN2020K11 | ● |       | 20              | 20 | 125 | 20 | 10   | 35 | DN**1104**                                                                          |
| MDPNN2525M11 | ● |       | 25              | 25 | 150 | 25 | 12,5 | 35 | DN**1104**                                                                          |
| MDPNN2020K15 | ● |       | 20              | 20 | 125 | 20 | 10   | 40 | DN**1506**                                                                          |
| MDPNN2525M15 | ● |       | 25              | 25 | 150 | 25 | 12,5 | 40 | DN**1506**                                                                          |
| MDPNN3225P15 | ● |       | 32              | 25 | 170 | 32 | 12,5 | 40 | DN**1506**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

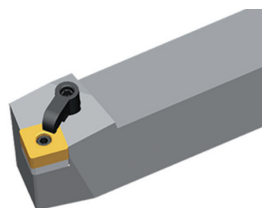
|                                                                                     | Inserto                 | DN**1104**         | DN**1104**         | DN**1506**         | DN**1506**         |
|-------------------------------------------------------------------------------------|-------------------------|--------------------|--------------------|--------------------|--------------------|
|                                                                                     | h                       | 20                 | 25-32              | 20                 | 25-32              |
|  | Staffa                  | C1RD               | C1RD               | C2RD               | C2RD               |
|  | Perno passante          | TM5×13             | TM5×13             | TM6×19             | TM6×19             |
|  | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) |
|  | Sottopiacchetta         | D11BM              | D11BM              | D15BM              | D15BM              |
|  | Chiave (staffa)         | WH30L              | WH30L              | WH30L              | WH30L              |
|  | Chiave (perno passante) | WH20L              | WH20L              | WH30L              | WH30L              |

## Inserto

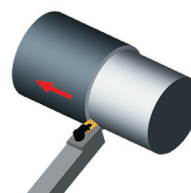
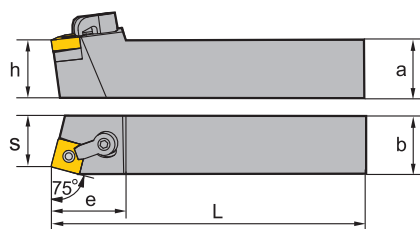
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Raschiante                                                                          | Finitura                                                                            | Media Lavor.                                                                        | Sgrossatura                                                                         | Lavor.- ghisa grigia                                                                | PCBN/PCD                                                                              |
| A62                                                                                 | A63                                                                                 | A63                                                                                 | A68                                                                                 | A69                                                                                 | A178                                                                                  |

## SN\*\* Portautensile (esterno) M-Bloccaggio

MSBNR/L Kr: 75°



Versione destra



| Articolo         | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|------------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                  |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| MSBNR/L2020K12   | ● | ●     |   | 20              | 20 | 125 | 20 | 17 | 32 | SN**1204** |
| MSBNR/L2525M12   | ● | ○     |   | 25              | 25 | 150 | 25 | 22 | 32 | SN**1204** |
| MSBNR/L3225P12   |   | ●     |   | 32              | 25 | 170 | 32 | 22 | 32 | SN**1204** |
| MSBNR/L2525M15   | ● | ○     |   | 25              | 25 | 150 | 25 | 22 | 38 | SN**1506** |
| MSBNR/L3232P15   | ● | ●     |   | 32              | 32 | 170 | 32 | 29 | 38 | SN**1506** |
| MSBNR/L4032R15   | ○ |       |   | 40              | 32 | 200 | 40 | 27 | 38 | SN**1506** |
| MSBNR/L3232P19   | ● | ●     |   | 32              | 32 | 170 | 32 | 27 | 45 | SN**1906** |
| MSBNR/L4040R19   | ○ | ●     |   | 40              | 40 | 200 | 40 | 35 | 45 | SN**1906** |
| MSBNR/L4040R25   | ● | ○     |   | 40              | 40 | 200 | 40 | 35 | 50 | SN**2507** |
| MSBNR/L4040S2509 | ○ | ○     |   | 40              | 40 | 250 | 40 | 35 | 50 | SN**2509** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                         |                    |                    |                    |                      |                       |                       |
|-------------------|-------------------------|--------------------|--------------------|--------------------|----------------------|-----------------------|-----------------------|
|                   | Inserto                 | SN**1204**         | SN**1204**         | SN**1506**         | SN**1906**           | SN**2507**            | SN**2509**            |
|                   | h                       | 20                 | 25-32              | 25-40              | 32-40                | 40                    | 40                    |
|                   | Staffa                  | C1RD               | C1RD               | C2RD               | C5RD                 | C6RD                  | C6RD                  |
|                   | Perno passante          | TM6x17             | TM6x17             | TM8x21             | TM10x21              | TM12x29               | TM12x29               |
|                   | Vite (staffa)           | DM6x25<br>(7,0 Nm) | DM6x30<br>(7,0 Nm) | DM6x30<br>(7,0 Nm) |                      |                       |                       |
|                   | Vite (staffa)           |                    |                    |                    | DM8x30X<br>(10,2 Nm) | DM10x35X<br>(16,6 Nm) | DM10x35X<br>(16,6 Nm) |
|                   | Sottopiacchetta         | S12BM              | S12BM              | S15BM              | S19BM                | S25BM                 | S25BM                 |
|                   | Chiave (staffa)         | WH30L              | WH30L              | WH30L              | WH40L                | WH40L                 | WH40L                 |
|                   | Chiave (perno passante) | WH31L              | WH31L              | WH30L              | WH40L                | WH50L                 | WH50L                 |

| Inserto  |              |             |                     |          |
|----------|--------------|-------------|---------------------|----------|
|          |              |             |                     |          |
| Finitura | Media Lavor. | Sgrossatura | Lavor- ghisa grigia | PCBN/PCD |
| A73      | A73          | A78         | A84                 | A162     |

Codice sistema > A228

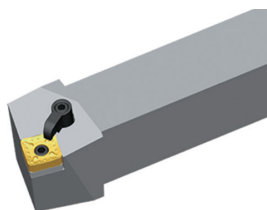
Scelta gradi > A42

Informazioni tecniche > A501

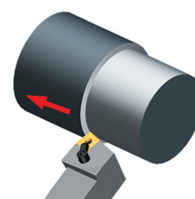
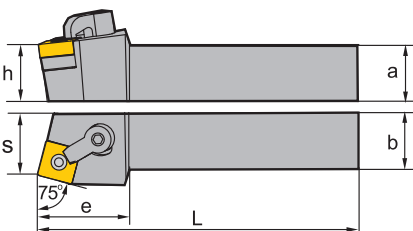
Dati di taglio > A366

## SN\*\* Portautensile (esterno) M-Bloccaggio

MSRNR/L Kr: 75°



Versione destra



| Articolo         | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|------------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                  |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| MSRNR/L2020K12   | ● | ●     |   | 20              | 20 | 125 | 20 | 22 | 36 | SN**1204** |
| MSRNR/L2525M12   | ● | ●     |   | 25              | 25 | 150 | 25 | 27 | 36 | SN**1204** |
| MSRNR/L3225P12   |   | ○     |   | 32              | 25 | 170 | 32 | 27 | 36 | SN**1204** |
| MSRNR/L2525M15   | ● | ○     |   | 25              | 25 | 150 | 25 | 27 | 40 | SN**1506** |
| MSRNR/L3232P15   | ● | ●     |   | 32              | 32 | 170 | 32 | 35 | 40 | SN**1506** |
| MSRNR/L4032R15   | ○ |       |   | 40              | 32 | 200 | 40 | 35 | 40 | SN**1506** |
| MSRNR/L3232P19   | ○ | ○     |   | 32              | 32 | 170 | 32 | 35 | 45 | SN**1906** |
| MSRNR/L4040R19   | ○ |       |   | 40              | 40 | 200 | 40 | 43 | 45 | SN**1906** |
| MSRNR/L4040R2509 | ○ | ○     |   | 40              | 40 | 200 | 40 | 43 | 50 | SN**2509** |
| MSRNR/L4040S2509 | ○ | ○     |   | 40              | 40 | 250 | 40 | 43 | 50 | SN**2509** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|  | Inserto                 | SN**1204**         | SN**1204**         | SN**1506**         | SN**1906**           | SN**2509**            |
|--|-------------------------|--------------------|--------------------|--------------------|----------------------|-----------------------|
|  | h                       | 20                 | 25-32              | 25-40              | 32-40                | 40                    |
|  | Staffa                  | C1RD               | C1RD               | C2RD               | C5RD                 | C6RD                  |
|  | Perno passante          | TM6×17             | TM6×17             | TM8×21             | TM10×21              | TM12×29               |
|  | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) |                      |                       |
|  | Vite (staffa)           |                    |                    |                    | DM8×30X<br>(10,2 Nm) | DM10×35X<br>(16,6 Nm) |
|  | Sottopiacchetta         | S12BM              | S12BM              | S15BM              | S19BM                | S25BM                 |
|  | Chiave (staffa)         | WH30L              | WH30L              | WH30L              | WH40L                | WH40L                 |
|  | Chiave (perno passante) | WH31L              | WH31L              | WH30L              | WH40L                | WH50L                 |

## Inserto

|          |              |             |                      |          |
|----------|--------------|-------------|----------------------|----------|
|          |              |             |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A73      | A73          | A78         | A84                  | A162     |

Codice sistema &gt; A228

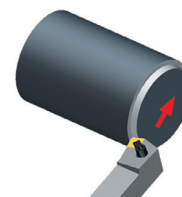
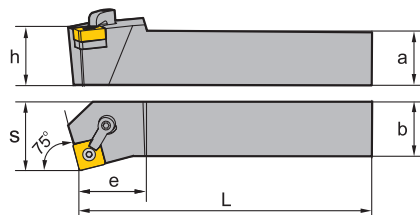
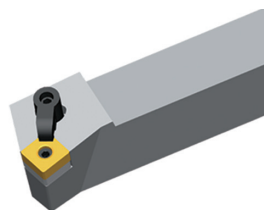
Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

Dati di taglio &gt; A366

## SN\*\* Portautensile (esterno) M-Bloccaggio

MSKNR/L Kr: 75°



Versione destra

| Articolo         | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|------------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                  |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| MSKNR/L2020K12   | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 32 | SN**1204** |
| MSKNR/L2525M12   | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 32 | SN**1204** |
| MSKNR/L3225P12   | ● | ○     |   | 32              | 25 | 170 | 32 | 32 | 32 | SN**1204** |
| MSKNR/L2525M15   | ● | ○     |   | 25              | 25 | 150 | 25 | 32 | 28 | SN**1506** |
| MSKNR/L3232P15   | ● | ○     |   | 32              | 32 | 170 | 32 | 40 | 38 | SN**1506** |
| MSKNR/L4032R15   |   | ○     |   | 40              | 32 | 200 | 40 | 40 | 38 | SN**1506** |
| MSKNR/L3232P19   | ● | ●     |   | 32              | 32 | 170 | 32 | 40 | 45 | SN**1906** |
| MSKNR/L4040R19   | ○ | ○     |   | 40              | 40 | 200 | 40 | 50 | 45 | SN**1906** |
| MSKNR/L4040S2509 | ○ | ●     |   | 40              | 40 | 250 | 40 | 50 | 50 | SN**2509** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|  | Inserto                 | SN**1204**         | SN**1204**         | SN**1506**         | SN**1906**           | SN**2509**            |
|--|-------------------------|--------------------|--------------------|--------------------|----------------------|-----------------------|
|  | h                       | 20                 | 25-32              | 25-40              | 32-40                | 40                    |
|  | Staffa                  | C1RD               | C1RD               | C2RD               | C5RD                 | C6RD                  |
|  | Perno passante          | TM6×17             | TM6×17             | TM8×21             | TM10×21              | TM12×29               |
|  | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) |                      |                       |
|  | Vite (staffa)           |                    |                    |                    | DM8×30X<br>(10,2 Nm) | DM10×35X<br>(16,6 Nm) |
|  | Sottopiacchetta         | S12BM              | S12BM              | S15BM              | S19BM                | S25BM                 |
|  | Chiave (staffa)         | WH30L              | WH30L              | WH30L              | WH40L                | WH40L                 |
|  | Chiave (perno passante) | WH30L              | WH30L              | WH30L              | WH40L                | WH50L                 |

### Inserto

|          |              |             |                      |          |
|----------|--------------|-------------|----------------------|----------|
|          |              |             |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A73      | A73          | A78         | A84                  | A162     |

Codice sistema > A228

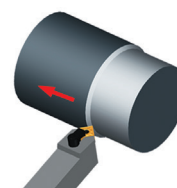
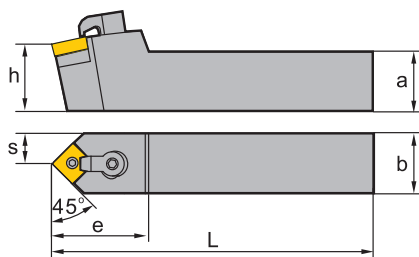
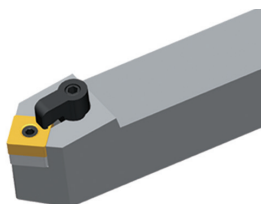
Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366

**SN\*\* Portautensile (esterno) M-Bloccaggio**

MSDNN Kr: 45°



| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |      |    | Inserto    |
|--------------|---|-------|-----------------|----|-----|----|------|----|------------|
|              |   |       | a               | b  | L   | h  | s    | e  |            |
| MSDNN2020K12 | ● |       | 20              | 20 | 125 | 20 | 10   | 35 | SN**1204** |
| MSDNN2525M12 | ● |       | 25              | 25 | 150 | 25 | 12,5 | 35 | SN**1204** |
| MSDNN3225P12 | ● |       | 32              | 25 | 170 | 32 | 12,5 | 35 | SN**1204** |
| MSDNN2525M15 | ● |       | 25              | 25 | 150 | 25 | 12,5 | 42 | SN**1506** |
| MSDNN3232P15 | ○ |       | 32              | 32 | 170 | 32 | 16   | 42 | SN**1506** |
| MSDNN4032R15 | ○ |       | 40              | 32 | 200 | 40 | 16   | 42 | SN**1506** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                         |                    |                    |                    |
|-------------------|-------------------------|--------------------|--------------------|--------------------|
|                   | Inserto                 | SN**1204**         | SN**1204**         | SN**1506**         |
|                   | h                       | 20                 | 25-32              | 25-40              |
|                   | Staffa                  | C1RD               | C1RD               | C2RD               |
|                   | Perno passante          | TM6×17             | TM6×17             | TM8×21             |
|                   | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) |
|                   | Sottopiacchetta         | S12BM              | S12BM              | S15BM              |
|                   | Chiave (staffa)         | WH30L              | WH30L              | WH30L              |
|                   | Chiave (perno passante) | WH30L              | WH30L              | WH30L              |

| Inserto         |                     |                    |                             |                  |
|-----------------|---------------------|--------------------|-----------------------------|------------------|
|                 |                     |                    |                             |                  |
| Finitura<br>A73 | Media Lavor.<br>A73 | Sgrossatura<br>A78 | Lavor.- ghisa grigia<br>A84 | PCBN/PCD<br>A162 |

Codice sistema &gt; A228

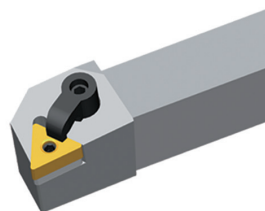
Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

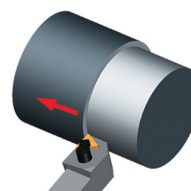
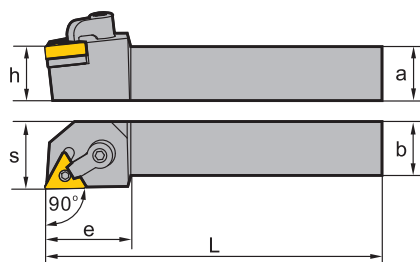
Dati di taglio &gt; A366

## TN\*\* Portautensile (esterno) M-Bloccaggio

MTGNR/L Kr: 90°



Versione destra



| Articolo       |  | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto                                                                             |
|----------------|-----------------------------------------------------------------------------------|-------|---|-----------------|----|-----|----|----|----|-------------------------------------------------------------------------------------|
|                |                                                                                   | R     | L | a               | b  | L   | h  | s  | e  |  |
| MTGNR/L2020K16 |                                                                                   | ●     | ○ | 20              | 20 | 125 | 20 | 25 | 33 | TN**1604**                                                                          |
| MTGNR/L2525M16 |                                                                                   | ●     | ● | 25              | 25 | 150 | 25 | 32 | 33 | TN**1604**                                                                          |
| MTGNR/L3225P16 |                                                                                   | ●     | ○ | 32              | 25 | 170 | 32 | 32 | 33 | TN**1604**                                                                          |
| MTGNR/L2525M22 |                                                                                   | ●     | ○ | 25              | 25 | 150 | 25 | 32 | 35 | TN**2204**                                                                          |
| MTGNR/L3225P22 |                                                                                   | ○     | ○ | 32              | 25 | 170 | 32 | 32 | 35 | TN**2204**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                         |                    |                     |                     |
|-------------------|-------------------------|--------------------|---------------------|---------------------|
|                   | Inserto<br>h            | TN**1604**<br>20   | TN**1604**<br>25-32 | TN**2204**<br>25-32 |
|                   | Staffa                  | C1RD               | C1RD                | C2RD                |
|                   | Perno passante          | TM5x13             | TM5x13              | TM6x17              |
|                   | Vite (staffa)           | DM6x25<br>(7,0 Nm) | DM6x30<br>(7,0 Nm)  | DM6x30<br>(7,0 Nm)  |
|                   | Sottopiacchetta         | T16BM              | T16BM               | T22BM               |
|                   | Chiave (staffa)         | WH30L              | WH30L               | WH30L               |
|                   | Chiave (perno passante) | WH20L              | WH20L               | WH30L               |

| Inserto           |                 |                     |                    |                  |                             |                  |
|-------------------|-----------------|---------------------|--------------------|------------------|-----------------------------|------------------|
|                   |                 |                     |                    |                  |                             |                  |
| Raschiante<br>A87 | Finitura<br>A88 | Media Lavor.<br>A90 | Sgrossatura<br>A92 | Alta asp.<br>A97 | Lavor.- ghisa grigia<br>A99 | PCBN/PCD<br>A163 |

Codice sistema > A228

Scelta gradi > A42

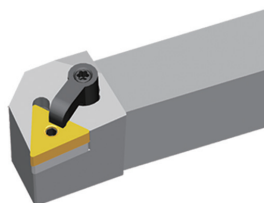
Informazioni tecniche > A501

Dati di taglio > A366

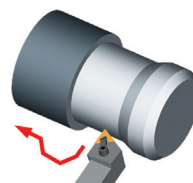
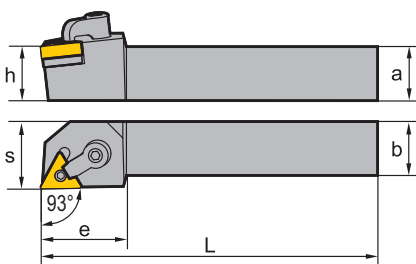


## TN\*\* Portautensile (esterno) M-Bloccaggio

MTJNR/L Kr: 93°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| MTJNR/L2020K16 | ● |       |   | 20              | 20 | 125 | 20 | 25 | 32 | TN**1604** |
| MTJNR/L2525M16 | ○ | ○     |   | 25              | 25 | 150 | 25 | 32 | 32 | TN**1604** |
| MTJNR/L3225P16 | ○ |       |   | 32              | 25 | 170 | 32 | 32 | 32 | TN**1604** |
| MTJNR/L2525M22 | ○ |       |   | 25              | 25 | 150 | 25 | 32 | 36 | TN**2204** |
| MTJNR/L3225P22 | ○ | ●     |   | 32              | 25 | 170 | 32 | 32 | 36 | TN**2204** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

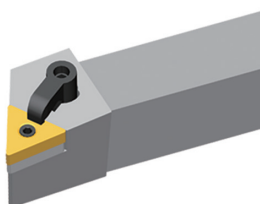
|  | Inserto<br>h            | TN**1604**<br>20   | TN**1604**<br>25-32 | TN**2204**<br>25-32 |
|--|-------------------------|--------------------|---------------------|---------------------|
|  | Staffa                  | C1RD               | C1RD                | C2RD                |
|  | Perno passante          | TM5×13             | TM5×13              | TM6×17              |
|  | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm)  | DM6×30<br>(7,0 Nm)  |
|  | Sottopiacchetta         | T16BM              | T16BM               | T22BM               |
|  | Chiave (staffa)         | WH30L              | WH30L               | WH30L               |
|  | Chiave (perno passante) | WH20L              | WH20L               | WH30L               |

## Inserto

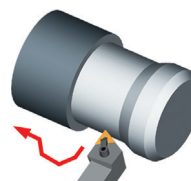
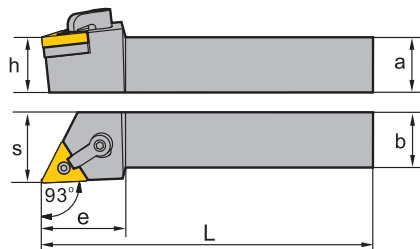
|                   |                 |                     |                    |                  |                             |                  |
|-------------------|-----------------|---------------------|--------------------|------------------|-----------------------------|------------------|
|                   |                 |                     |                    |                  |                             |                  |
| Raschiante<br>A87 | Finitura<br>A88 | Media Lavor.<br>A90 | Sgrossatura<br>A92 | Alta asp.<br>A97 | Lavor.- ghisa grigia<br>A99 | PCBN/PCD<br>A163 |

## TN\*\* Portautensile (esterno) M-Bloccaggio

MTJNR/L-Z Kr: 93°



Versione destra



| Articolo         | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|------------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                  |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| MTJNR/L2020K16-Z | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 32 | TN**1604** |
| MTJNR/L2525M16-Z | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 32 | TN**1604** |
| MTJNR/L3225P16-Z | ● | ○     |   | 32              | 25 | 170 | 32 | 32 | 32 | TN**1604** |
| MTJNR/L2525M22-Z | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 36 | TN**2204** |
| MTJNR/L3225P22-Z | ● | ○     |   | 32              | 25 | 170 | 32 | 32 | 36 | TN**2204** |

● In magazzino ○ Su richiesta

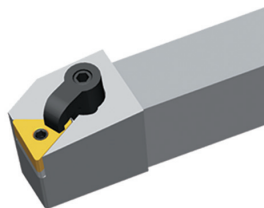
\* Con raffreddamento interno

| Parti di ricambio |                         |                    |                     |                     |
|-------------------|-------------------------|--------------------|---------------------|---------------------|
|                   | Inserto<br>h            | TN**1604**<br>20   | TN**1604**<br>25-32 | TN**2204**<br>25-32 |
|                   | Staffa                  | C1RD               | C1RD                | C2RD                |
|                   | Perno passante          | TM5×13             | TM5×13              | TM6×17              |
|                   | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm)  | DM6×30<br>(7,0 Nm)  |
|                   | Sottopiacchetta         | T16BM              | T16BM               | T22BM               |
|                   | Chiave (staffa)         | WH30L              | WH30L               | WH30L               |
|                   | Chiave (perno passante) | WH20L              | WH20L               | WH30L               |

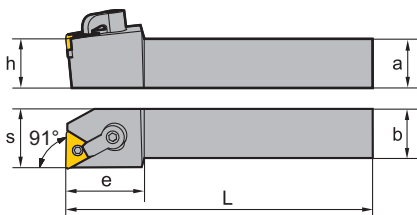
| Inserto           |                 |                     |                    |                  |                             |                  |
|-------------------|-----------------|---------------------|--------------------|------------------|-----------------------------|------------------|
|                   |                 |                     |                    |                  |                             |                  |
| Raschiante<br>A87 | Finitura<br>A88 | Media Lavor.<br>A90 | Sgrossatura<br>A92 | Alta asp.<br>A97 | Lavor.- ghisa grigia<br>A99 | PCBN/PCD<br>A163 |

**TN\*\* Portautensile (esterno) M-Bloccaggio**

MTFNR/L Kr: 91°



Versione destra



| Articolo       |  | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto                                                                             |
|----------------|-----------------------------------------------------------------------------------|-------|---|-----------------|----|-----|----|----|----|-------------------------------------------------------------------------------------|
|                |                                                                                   | R     | L | a               | b  | L   | h  | s  | e  |  |
| MTFNR/L2020K16 |                                                                                   | ●     | ○ | 20              | 20 | 125 | 20 | 25 | 32 | TN**1604**                                                                          |
| MTFNR/L2525M16 |                                                                                   | ●     | ● | 25              | 25 | 150 | 25 | 32 | 32 | TN**1604**                                                                          |
| MTFNR/L3225P16 |                                                                                   | ●     |   | 32              | 25 | 170 | 32 | 32 | 32 | TN**1604**                                                                          |
| MTFNR/L2525M22 |                                                                                   | ●     | ○ | 25              | 25 | 150 | 25 | 32 | 36 | TN**2204**                                                                          |
| MTFNR/L3225P22 |                                                                                   | ●     | ○ | 32              | 25 | 170 | 32 | 32 | 36 | TN**2204**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|  | Inserto<br>h            | TN**1604**<br>20   | TN**1604**<br>25-32 | TN**2204**<br>25-32 |
|--|-------------------------|--------------------|---------------------|---------------------|
|  | Staffa                  | C1RD               | C1RD                | C2RD                |
|  | Perno passante          | TM5×13             | TM5×13              | TM6×17              |
|  | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm)  | DM6×30<br>(7,0 Nm)  |
|  | Sottopiacchetta         | T16BM              | T16BM               | T22BM               |
|  | Chiave (staffa)         | WH30L              | WH30L               | WH30L               |
|  | Chiave (perno passante) | WH20L              | WH20L               | WH30L               |

## Inserto

|                   |                 |                     |                    |                  |                             |                  |
|-------------------|-----------------|---------------------|--------------------|------------------|-----------------------------|------------------|
|                   |                 |                     |                    |                  |                             |                  |
| Raschiante<br>A87 | Finitura<br>A88 | Media Lavor.<br>A90 | Sgrossatura<br>A92 | Alta asp.<br>A97 | Lavor.- ghisa grigia<br>A99 | PCBN/PCD<br>A163 |

Codice sistema &gt; A228

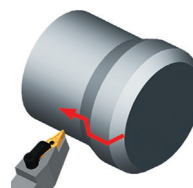
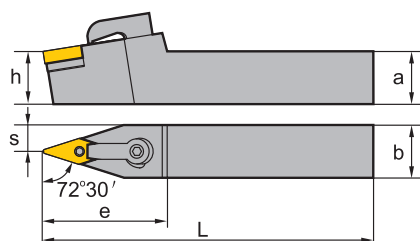
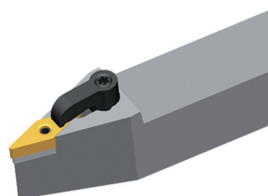
Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

Dati di taglio &gt; A366

## VN\*\* Portautensile (esterno) M-Bloccaggio

MVVNN Kr: 72°30'



| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |      |    | Inserto    |
|--------------|---|-------|-----------------|----|-----|----|------|----|------------|
|              |   |       | a               | b  | L   | h  | s    | e  |            |
| MVVNN2020K16 | ● |       | 20              | 20 | 125 | 20 | 10   | 45 | VN**1604** |
| MVVNN2525M16 | ● |       | 25              | 25 | 150 | 25 | 12,5 | 45 | VN**1604** |
| MVVNN3225P16 | ○ |       | 32              | 25 | 170 | 32 | 12,5 | 45 | VN**1604** |
| MVVNN3232P16 | ● |       | 32              | 32 | 170 | 32 | 16   | 45 | VN**1604** |

● In magazzino ○ Su richiesta

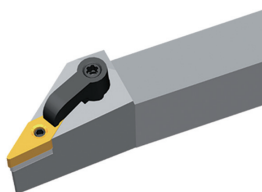
\* Con raffreddamento interno

| Parti di ricambio |                         |                    |                    |
|-------------------|-------------------------|--------------------|--------------------|
|                   | Inserto                 | VN**1604**         | VN**1604**         |
|                   | h                       | 20                 | 25-32              |
|                   | Staffa                  | C3RD               | C3RD               |
|                   | Perno passante          | TM5×13             | TM5×13             |
|                   | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) |
|                   | Sottopiacchetta         | V16BM              | V16BM              |
|                   | Chiave (staffa)         | WH30L              | WH30L              |
|                   | Chiave (perno passante) | WH20L              | WH20L              |

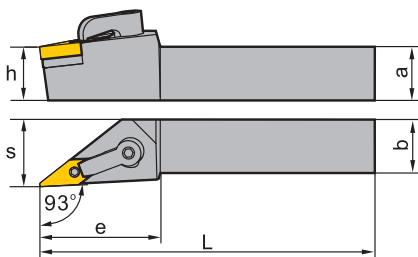
| Inserto  |              |             |                     |          |
|----------|--------------|-------------|---------------------|----------|
|          |              |             |                     |          |
| Finitura | Media Lavor. | Sgrossatura | Lavor- ghisa grigia | PCBN/PCD |
| A102     | A102         | A104        | A103                | A179     |

## VN\*\* Portautensile (esterno) M-Bloccaggio

MVJNR/L Kr: 93°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| MVJNR/L2020K16 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 45 | VN**1604** |
| MVJNR/L2525M16 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 45 | VN**1604** |
| MVJNR/L3225P16 | ● | ●     |   | 32              | 25 | 170 | 32 | 32 | 45 | VN**1604** |
| MVJNR/L3232P16 | ● | ●     |   | 32              | 32 | 170 | 32 | 40 | 45 | VN**1604** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|  | Inserto                 | VN**1604**         | VN**1604**         |
|--|-------------------------|--------------------|--------------------|
|  | h                       | 20                 | 25-32              |
|  | Staffa                  | C3RD               | C3RD               |
|  | Perno passante          | TM5×13             | TM5×13             |
|  | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) |
|  | Sottopiacchetta         | V16BM              | V16BM              |
|  | Chiave (staffa)         | WH30L              | WH30L              |
|  | Chiave (perno passante) | WH20L              | WH20L              |

## Inserto

|          |              |             |                      |          |
|----------|--------------|-------------|----------------------|----------|
|          |              |             |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A102     | A102         | A104        | A103                 | A179     |

Codice sistema &gt; A228

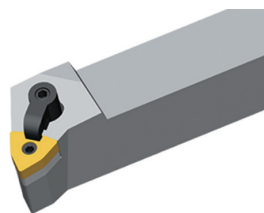
Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

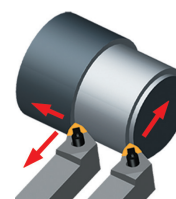
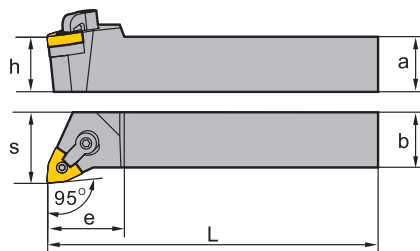
Dati di taglio &gt; A366

## WN\*\* Portautensile (esterno) M-Bloccaggio

MWLNR/L Kr: 95°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| MWLNR/L2020K06 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 30 | WN**0604** |
| MWLNR/L2525M06 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 30 | WN**0604** |
| MWLNR/L2020K08 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 30 | WN**0804** |
| MWLNR/L2525M08 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 35 | WN**0804** |
|                | ○ |       |   | 25              | 25 | 170 | 25 | 32 | 35 | WN**0804** |
| MWLNR/L3232P08 | ● | ●     |   | 32              | 32 | 170 | 32 | 40 | 35 | WN**0804** |

● In magazzino ○ Su richiesta

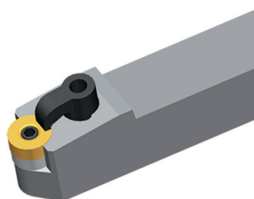
\* Con raffreddamento interno

| Parti di ricambio |                         |                    |                    |                    |                    |
|-------------------|-------------------------|--------------------|--------------------|--------------------|--------------------|
|                   | Inserto                 | WN**0604**         | WN**0604**         | WN**0804**         | WN**0804**         |
|                   | h                       | 20                 | 25                 | 20                 | 25-32              |
|                   | Staffa                  | C1RD               | C1RD               | C1RD               | C1RD               |
|                   | Perno passante          | TM5×13             | TM5×13             | TM6×17             | TM6×17             |
|                   | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) |
|                   | Sottopiacchetta         | W06BM              | W06BM              | W08BM              | W08BM              |
|                   | Chiave (staffa)         | WH30L              | WH30L              | WH30L              | WH30L              |
|                   | Chiave (perno passante) | WH20L              | WH20L              | WH30L              | WH30L              |

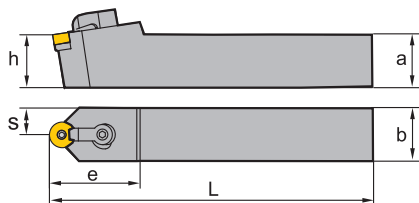
| Inserto    |          |              |             |                      |          |
|------------|----------|--------------|-------------|----------------------|----------|
|            |          |              |             |                      |          |
| Raschiante | Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A106       | A107     | A107         | A109        | A111                 | A165     |

## RN\*\* Portautensile (esterno) M-Bloccaggio

MRDNN



Versione destra



| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |      |    | Inserto                                                                             |
|--------------|---|-------|-----------------|----|-----|----|------|----|-------------------------------------------------------------------------------------|
|              |   |       | a               | b  | L   | h  | s    | e  |  |
| MRDNN2020K12 |   | ○     | 20              | 20 | 125 | 20 | 10   | 35 | RN**1204**                                                                          |
| MRDNN2525M12 |   | ○     | 25              | 25 | 150 | 25 | 12,5 | 35 | RN**1204**                                                                          |
| MRDNN3225P12 |   | ○     | 32              | 25 | 170 | 32 | 12,5 | 35 | RN**1204**                                                                          |
| MRDNN3232P12 |   | ○     | 32              | 32 | 170 | 32 | 16   | 35 | RN**1204**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|                                                                                     | Inserto                 | RN**1204**         | RN**1204**         |
|-------------------------------------------------------------------------------------|-------------------------|--------------------|--------------------|
|                                                                                     | h                       | 20                 | 25-32              |
|  | Staffa                  | C1RD               | C1RD               |
|  | Perno passante          | TM6×17             | TM6×17             |
|  | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) |
|  | Sottopiacchetta         | R12BM              | R12BM              |
|  | Chiave (staffa)         | WH30L              | WH30L              |
|  | Chiave (perno passante) | WH30L              | WH30L              |

## Inserto



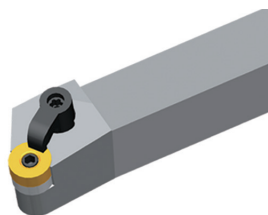
Lavor.- ghisa grigia

A112

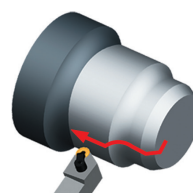
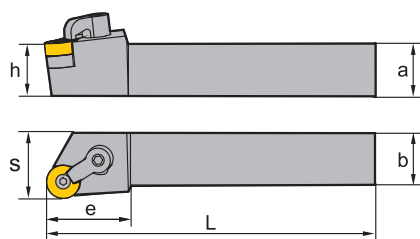
## RN\*\* Portautensile (esterno)

### M-Bloccaggio

MRGNR/L



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| MRGNR/L2020K12 | ○ | ○     |   | 20              | 20 | 125 | 20 | 25 | 32 | RN**1204** |
| MRGNR/L2525M12 | ○ | ●     |   | 25              | 25 | 150 | 25 | 32 | 32 | RN**1204** |
| MRGNR/L3225P12 | ○ | ○     |   | 32              | 25 | 170 | 32 | 32 | 32 | RN**1204** |
| MRGNR/L3232P12 | ○ | ○     |   | 32              | 32 | 170 | 32 | 40 | 32 | RN**1204** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

#### Parti di ricambio

|  | Inserto                 | RN**1204**         | RN**1204**         |
|--|-------------------------|--------------------|--------------------|
|  | h                       | 20                 | 25-32              |
|  | Staffa                  | C1RD               | C1RD               |
|  | Perno passante          | TM6×17             | TM6×17             |
|  | Vite (staffa)           | DM6×25<br>(7,0 Nm) | DM6×30<br>(7,0 Nm) |
|  | Sottopiacchetta         | R12BM              | R12BM              |
|  | Chiave (staffa)         | WH30L              | WH30L              |
|  | Chiave (perno passante) | WH30L              | WH30L              |

Inserto



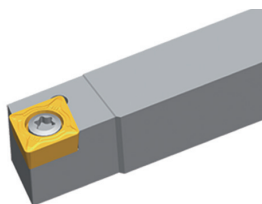
Lavor.- ghisa grigia

A112

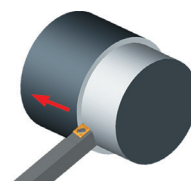
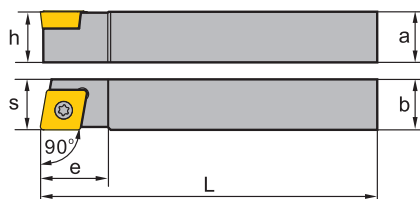


## CC\*\* Portautensile (esterno) S-Bloccaggio

SCACR/L Kr: 90°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |    |    |      |    | Inserto                                                                             |
|----------------|---|-------|---|-----------------|----|----|----|------|----|-------------------------------------------------------------------------------------|
|                |   | R     | L | a               | b  | L  | h  | s    | e  |  |
| SCACR/L1010E06 |   | ●     | ● | 10              | 10 | 70 | 10 | 10,5 | 10 | CC**0602**                                                                          |
| SCACR/L1212F09 |   | ●     | ● | 12              | 12 | 80 | 12 | 12,7 | 16 | CC**09T3**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

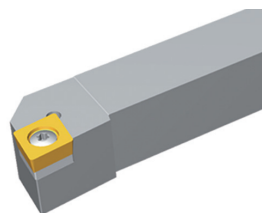
|                                                                                     | Inserto       | CC**0602**              | CC**09T3**            |
|-------------------------------------------------------------------------------------|---------------|-------------------------|-----------------------|
|                                                                                     | h             | 10                      | 12                    |
|  | Vite          | I60M2,5×6,5<br>(1,0 Nm) | I60M3,5×8<br>(2,7 Nm) |
|  | Chiave (vite) | WT07IP                  | WT15IP                |

## Inserto

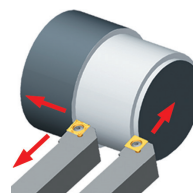
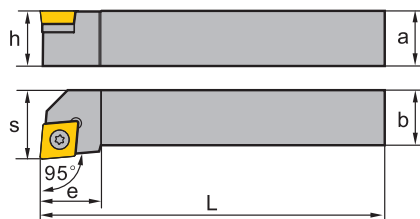
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Finitura                                                                            | Media Lavor.                                                                        | Sgrossatura                                                                         | Lavorazione Al.                                                                     | Lavor.- ghisa grigia                                                                | PCBN/PCD                                                                              |
| A116                                                                                | A119                                                                                | A121                                                                                | A122                                                                                | A121                                                                                | A180                                                                                  |

## CC\*\* Portautensile (esterno) S-Bloccaggio

SCLCR/L Kr: 95°



Versione destra



| Articolo       | * | Stock |    | Dimensioni [mm] |     |    |    |    |                |    | Inserto    |
|----------------|---|-------|----|-----------------|-----|----|----|----|----------------|----|------------|
|                |   | R     | L  | a               | b   | L  | h  | s  | L <sub>2</sub> | e  |            |
| SCLCR/L0808D06 | ● | ●     | 8  | 8               | 60  | 8  | 10 | 10 | 10             | 10 | CC**0602** |
| SCLCR/L1010E06 | ● | ●     | 10 | 10              | 70  | 10 | 12 | 10 | 10             | 10 | CC**0602** |
| SCLCR/L1212F09 | ● | ●     | 12 | 12              | 80  | 12 | 16 | 16 | 16             | 16 | CC**09T3** |
| SCLCR/L1616H09 | ● | ●     | 16 | 16              | 100 | 16 | 20 | 16 | 16             | 16 | CC**09T3** |
| SCLCR/L2020K09 | ● | ●     | 20 | 20              | 125 | 20 | 25 | 25 | 25             | 25 | CC**09T3** |
| SCLCR/L1616H12 | ● | ●     | 16 | 16              | 100 | 16 | 20 | 18 | 18             | 18 | CC**1204** |
| SCLCR/L2020K12 | ● | ●     | 20 | 20              | 125 | 20 | 25 | 25 | 25             | 25 | CC**1204** |
| SCLCR/L2525M12 | ● | ●     | 25 | 25              | 150 | 25 | 32 | 26 | 26             | 26 | CC**1204** |
| SCLCR/L3225P12 | ○ | ○     | 32 | 25              | 170 | 32 | 32 | 26 | 26             | 26 | CC**1204** |
| SCLCR/L3232P12 | ● | ●     | 32 | 32              | 170 | 32 | 40 | 28 | 28             | 28 | CC**1204** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                          |                         |                       |                       |
|-------------------|--------------------------|-------------------------|-----------------------|-----------------------|
|                   | Inserto                  | CC**0602**              | CC**09T3**            | CC**1204**            |
|                   | h                        | 8-10                    | 12-20                 | 16-32                 |
|                   | Vite                     | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x8<br>(2,7 Nm) | I60M4x11X<br>(3,4 Nm) |
|                   | Vite                     |                         |                       |                       |
|                   | Vite (sottoplacchetta)   |                         |                       | SM6x10XA              |
|                   | Sottoplacchetta          |                         |                       | C12BS                 |
|                   | Chiave (vite)            | WT07IP                  | WT15IP                | WT15IP                |
|                   | Chiave (sottoplacchetta) |                         |                       | WH40L                 |

| Inserto  |              |             |                 |                     |          |
|----------|--------------|-------------|-----------------|---------------------|----------|
|          |              |             |                 |                     |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor- ghisa grigia | PCBN/PCD |
| A116     | A119         | A121        | A122            | A121                | A180     |

Codice sistema > A228

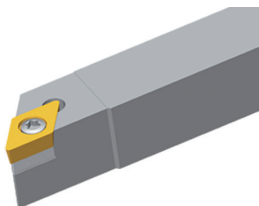
Scelta gradi > A42

Informazioni tecniche > A501

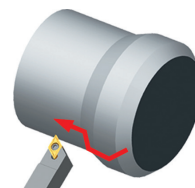
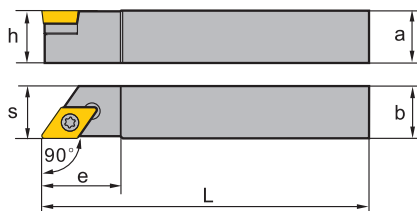
Dati di taglio > A366

## DC\*\* Portautensile (esterno) S-Bloccaggio

SDACR/L Kr: 90°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |      |    | Inserto                                                                             |
|----------------|---|-------|---|-----------------|----|-----|----|------|----|-------------------------------------------------------------------------------------|
|                |   | R     | L | a               | b  | L   | h  | s    | e  |  |
| SDACR/L1010E07 |   | ●     | ● | 10              | 10 | 70  | 10 | 10,5 | 15 | DC**0702**                                                                          |
| SDACR/L1212F11 |   | ●     | ● | 12              | 12 | 80  | 12 | 12,5 | 15 | DC**11T3**                                                                          |
| SDACR/L1616H11 |   | ●     | ● | 16              | 16 | 100 | 16 | 16,7 | 24 | DC**11T3**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|                                                                                     | Inserto                       | DC**0702**              | DC**11T3**            | DC**11T3**             |
|-------------------------------------------------------------------------------------|-------------------------------|-------------------------|-----------------------|------------------------|
|                                                                                     | h                             | 10                      | 12                    | 16                     |
|  | Vite                          | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x8<br>(2,7 Nm) | I60M3,5x12<br>(2,7 Nm) |
|  | Vite (sottopla-<br>chetta)    |                         |                       | SM5x8.65XA             |
|  | Sottoplachetta                |                         |                       | D11BS                  |
|  | Chiave (vite)                 | WT07IP                  | WT15IP                | WT15IP                 |
|  | Chiave (sotto-<br>placchetta) |                         |                       | WH35L                  |

## Inserto

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Finitura                                                                            | Media Lavor.                                                                        | Sgrossatura                                                                         | Lavorazione Al.                                                                     | Lavor.- ghisa grigia                                                                | PCBN/PCD                                                                              |
| A126                                                                                | A127                                                                                | A129                                                                                | A129                                                                                | A129                                                                                | A184                                                                                  |

Codice sistema &gt; A228

Scelta gradi &gt; A42

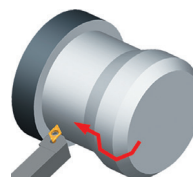
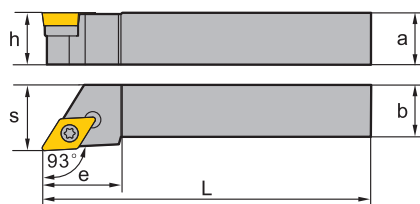
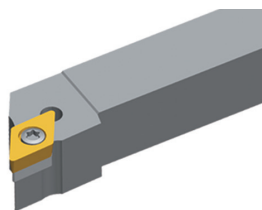
Informazioni tecniche &gt; A501

Dati di taglio &gt; A366

## DC\*\* Portautensile (esterno)

### S-Bloccaggio

SDJCR/L Kr: 93°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| SDJCR/L1010E07 | ● | ●     |   | 10              | 10 | 70  | 10 | 12 | 15 | DC**0702** |
| SDJCR/L1212F07 | ● | ●     |   | 12              | 12 | 80  | 12 | 16 | 15 | DC**0702** |
| SDJCR/L1616H07 | ● | ●     |   | 16              | 16 | 100 | 16 | 20 | 18 | DC**0702** |
| SDJCR/L1616H11 | ● | ●     |   | 16              | 16 | 100 | 16 | 20 | 24 | DC**11T3** |
| SDJCR/L2020K11 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 24 | DC**11T3** |
| SDJCR/L2525M11 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 29 | DC**11T3** |
| SDJCR/L3225P11 | ● | ●     |   | 32              | 25 | 170 | 32 | 32 | 29 | DC**11T3** |

● In magazzino ○ Su richiesta

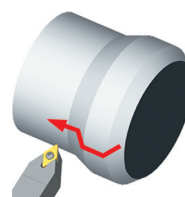
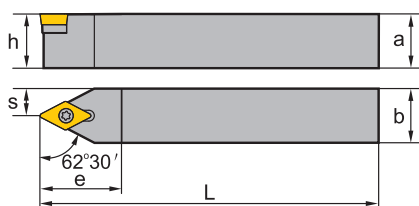
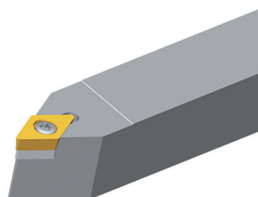
\* Con raffreddamento interno

| Parti di ricambio |                          |                         |                        |
|-------------------|--------------------------|-------------------------|------------------------|
|                   | Inserto                  | DC**0702**              | DC**11T3**             |
|                   | h                        | 10-16                   | 16-32                  |
|                   | Vite                     | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x12<br>(2,7 Nm) |
|                   | Vite (sottoplacchetta)   |                         | SM5x8.65XA             |
|                   | Sottoplacchetta          |                         | D11BS                  |
|                   | Chiave (vite)            | WT07IP                  | WT15IP                 |
|                   | Chiave (sottoplacchetta) |                         | WH35L                  |

| Inserto  |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A126     | A127         | A129        | A129            | A129                 | A184     |

## DC\*\* Portautensile (esterno) S-Bloccaggio

SDNCN Kr: 62°30'



| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |      |    | Inserto                                                                             |
|--------------|---|-------|-----------------|----|-----|----|------|----|-------------------------------------------------------------------------------------|
|              |   |       | a               | b  | L   | h  | s    | e  |  |
| SDNCN1010E07 |   | ●     | 10              | 10 | 70  | 10 | 5    | 20 | DC**0702**                                                                          |
| SDNCN1212F07 |   | ●     | 12              | 12 | 80  | 12 | 6    | 20 | DC**0702**                                                                          |
| SDNCN1212H11 |   | ●     | 12              | 12 | 100 | 12 | 6    | 30 | DC**11T3**                                                                          |
| SDNCN1616H11 |   | ●     | 16              | 16 | 100 | 16 | 8    | 30 | DC**11T3**                                                                          |
| SDNCN2020K11 |   | ●     | 20              | 20 | 125 | 20 | 10   | 30 | DC**11T3**                                                                          |
| SDNCN2525M11 |   | ●     | 25              | 25 | 150 | 25 | 12,5 | 30 | DC**11T3**                                                                          |

● In magazzino ○ Su richiesta

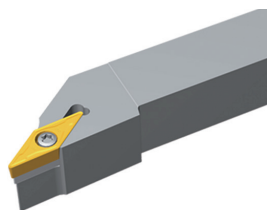
\* Con raffreddamento interno

| Parti di ricambio                                                                   |                          |                         |                       |                        |
|-------------------------------------------------------------------------------------|--------------------------|-------------------------|-----------------------|------------------------|
|                                                                                     | Inserto                  | DC**0702**              | DC**11T3**            | DC**11T3**             |
|                                                                                     | h                        | 10-12                   | 12                    | 16-25                  |
|  | Vite                     | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x8<br>(2,7 Nm) | I60M3,5x12<br>(2,7 Nm) |
|  | Vite (sottoplacchetta)   |                         |                       | SM5x8.65XA             |
|  | Sottoplacchetta          |                         |                       | D11BS                  |
|  | Chiave (vite)            | WT07IP                  | WT15IP                | WT15IP                 |
|  | Chiave (sottoplacchetta) |                         |                       | WH35L                  |

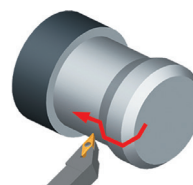
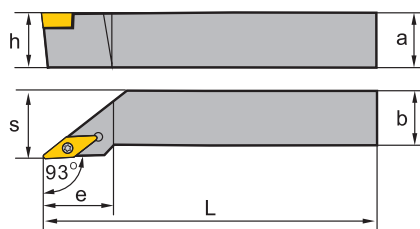
| Inserto                                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Finitura                                                                            | Media Lavor.                                                                        | Sgrossatura                                                                         | Lavorazione Al.                                                                     | Lavor.- ghisa grigia                                                                | PCBN/PCD                                                                              |
| A126                                                                                | A127                                                                                | A129                                                                                | A129                                                                                | A129                                                                                | A184                                                                                  |

## VB\*\* Portautensile (esterno) S-Bloccaggio

SVJBR/L Kr: 93°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| SVJBR/L1212F11 |   | •     |   | 12              | 12 | 80  | 12 | 16 | 27 | VB**1103** |
| SVJBR/L1616H11 |   | •     | • | 16              | 16 | 100 | 16 | 20 | 27 | VB**1103** |
| SVJBR/L2525M11 |   | •     | • | 25              | 25 | 150 | 25 | 32 | 27 | VB**1103** |
| SVJBR/L1616H16 |   | •     | • | 16              | 16 | 100 | 16 | 20 | 36 | VB**1604** |
| SVJBR/L2020K16 |   | •     | • | 20              | 20 | 125 | 20 | 25 | 41 | VB**1604** |
| SVJBR/L2525M16 |   | •     | • | 25              | 25 | 150 | 25 | 32 | 41 | VB**1604** |
| SVJBR/L3225P16 |   | •     | • | 32              | 25 | 170 | 32 | 32 | 41 | VB**1604** |

• In magazzino ○ Su richiesta

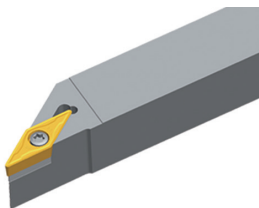
\* Con raffreddamento interno

| Parti di ricambio |                          |                         |                        |
|-------------------|--------------------------|-------------------------|------------------------|
|                   | Inserto                  | VB**1103**              | VB**1604**             |
|                   | h                        | 12-25                   | 16-32                  |
|                   | Vite                     | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x12<br>(2,7 Nm) |
|                   | Vite (sottopiacchetta)   |                         | SM5x8.65XA             |
|                   | Sottopiacchetta          |                         | V16BS                  |
|                   | Chiave (vite)            | WT07IP                  | WT15IP                 |
|                   | Chiave (sottopiacchetta) |                         | WH35L                  |

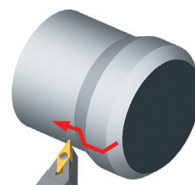
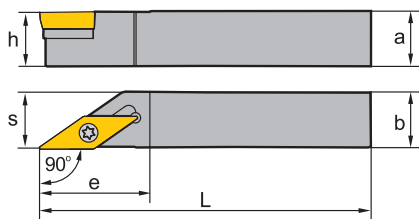
| Inserto  |              |             |          |
|----------|--------------|-------------|----------|
|          |              |             |          |
| Finitura | Media Lavor. | Sgrossatura | PCBN/PCD |
| A148     | A151         | A152        | A191     |

## VB\*\* Portautensile (esterno) S-Bloccaggio

SVABR/L Kr: 90°



Versione destra



| Articolo       |  | Stock |   | Dimensioni [mm] |    |     |    |      |    | Inserto                                                                             |
|----------------|-----------------------------------------------------------------------------------|-------|---|-----------------|----|-----|----|------|----|-------------------------------------------------------------------------------------|
|                |                                                                                   | R     | L | a               | b  | L   | h  | s    | e  |  |
| SVABR/L1010F11 |                                                                                   | ●     | ● | 10              | 10 | 80  | 10 | 10,5 | 28 | VB**1103**                                                                          |
| SVABR/L1616H16 |                                                                                   | ●     | ○ | 16              | 16 | 100 | 16 | 16,5 | 28 | VB**1604**                                                                          |
| SVABR/L2020K16 |                                                                                   | ●     | ○ | 20              | 20 | 125 | 20 | 20,5 | 28 | VB**1604**                                                                          |
| SVABR/L2525M16 |                                                                                   | ●     | ● | 25              | 25 | 150 | 25 | 25,5 | 28 | VB**1604**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

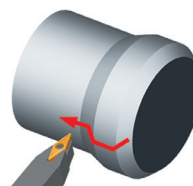
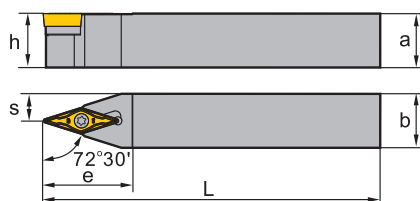
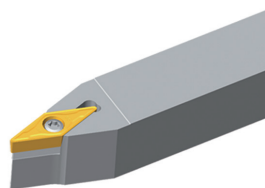
|                                                                                     | Inserto                  | VB**1103**              | VB**1604**             |
|-------------------------------------------------------------------------------------|--------------------------|-------------------------|------------------------|
|                                                                                     | h                        | 10                      | 16-32                  |
|  | Vite                     | I60M2,5×6,5<br>(1,0 Nm) | I60M3,5×12<br>(2,7 Nm) |
|  | Vite (sottoplacchetta)   |                         | SM5×8.65XA             |
|  | Sottoplacchetta          |                         | V16BS                  |
|  | Chiave (vite)            | WT07IP                  | WT15IP                 |
|  | Chiave (sottoplacchetta) |                         | WH35L                  |

## Inserto

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |
| Finitura                                                                            | Media Lavor.                                                                        | Sgrossatura                                                                         | PCBN/PCD                                                                            |
| A148                                                                                | A151                                                                                | A152                                                                                | A191                                                                                |

## VB\*\* Portautensile (esterno) S-Bloccaggio

SVVBN Kr: 72°30'



| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |      |    | Inserto                                                                             |
|--------------|---|-------|-----------------|----|-----|----|------|----|-------------------------------------------------------------------------------------|
|              |   |       | a               | b  | L   | h  | s    | e  |  |
| SVVBN1616H11 | ● |       | 16              | 16 | 100 | 16 | 8    | 27 | VB**1103**                                                                          |
| SVVBN2020K11 | ● |       | 20              | 20 | 125 | 20 | 10   | 30 | VB**1103**                                                                          |
| SVVBN1616H16 | ● |       | 16              | 16 | 100 | 16 | 8    | 33 | VB**1604**                                                                          |
| SVVBN2020K16 | ● |       | 20              | 20 | 125 | 20 | 10   | 33 | VB**1604**                                                                          |
| SVVBN2525M16 | ● |       | 25              | 25 | 150 | 25 | 12,5 | 38 | VB**1604**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

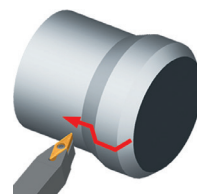
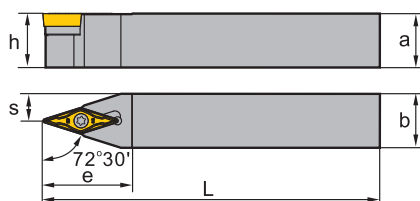
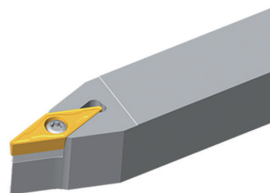
| Parti di ricambio                                                                   |                          |                         |                        |
|-------------------------------------------------------------------------------------|--------------------------|-------------------------|------------------------|
|                                                                                     | Inserto                  | VB**1103**              | VB**1604**             |
|                                                                                     | h                        | 12-25                   | 16-32                  |
|  | Vite                     | I60M2,5×6,5<br>(1,0 Nm) | I60M3,5×12<br>(2,7 Nm) |
|  | Vite (sottoplacchetta)   |                         | SM5×8.65XA             |
|  | Sottoplacchetta          |                         | V16BS                  |
|  | Chiave (vite)            | WT07IP                  | WT15IP                 |
|  | Chiave (sottoplacchetta) |                         | WH35L                  |

| Inserto                                                                             |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |
| Finitura                                                                            | Media Lavor.                                                                        | Sgrossatura                                                                         | PCBN/PCD                                                                            |
| A148                                                                                | A151                                                                                | A152                                                                                | A191                                                                                |



## VC\*\* Portautensile (esterno) S-Bloccaggio

SVVCN Kr: 72°30'



| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |      |    | Inserto    |
|--------------|---|-------|-----------------|----|-----|----|------|----|------------|
|              |   |       | a               | b  | L   | h  | s    | e  |            |
| SVVCN1212F11 |   | ●     | 12              | 12 | 80  | 12 | 6    | 27 | VC**1103** |
| SVVCN1616H11 |   | ●     | 16              | 16 | 100 | 16 | 8    | 27 | VC**1103** |
| SVVCN2020K11 |   | ●     | 20              | 20 | 125 | 20 | 10   | 30 | VC**1103** |
| SVVCN1212M11 |   | ●     | 12              | 12 | 150 | 12 | 6    | 27 | VC**1103** |
| SVVCN2525M11 |   | ●     | 25              | 25 | 150 | 25 | 12,5 | 38 | VC**1103** |
| SVVCN1616H16 |   | ●     | 16              | 16 | 100 | 16 | 8    | 33 | VC**1604** |
| SVVCN2020K16 |   | ●     | 20              | 20 | 125 | 20 | 10   | 33 | VC**1604** |
| SVVCN2525M16 |   | ●     | 25              | 25 | 150 | 25 | 12,5 | 38 | VC**1604** |

● In magazzino ○ Su richiesta

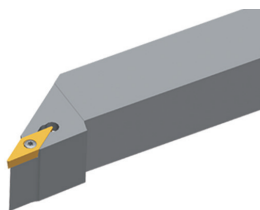
\* Con raffreddamento interno

| Parti di ricambio |                          |                         |                        |
|-------------------|--------------------------|-------------------------|------------------------|
|                   | Inserto                  | VC**1103**              | VC**1604**             |
|                   | h                        | 12-25                   | 16-32                  |
|                   | Vite                     | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x12<br>(2,7 Nm) |
|                   | Vite (sottoplacchetta)   |                         | SM5x8.65XA             |
|                   | Sottoplacchetta          |                         | V16BSC                 |
|                   | Chiave (vite)            | WT07IP                  | WT15IP                 |
|                   | Chiave (sottoplacchetta) |                         | WH35L                  |

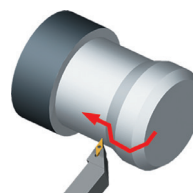
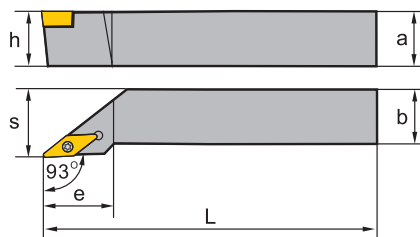
| Inserto  |              |                 |          |
|----------|--------------|-----------------|----------|
|          |              |                 |          |
| Finitura | Media Lavor. | Lavorazione Al. | PCBN/PCD |
| A156     | A156         | A154            | A193     |

## VC\*\* Portautensile (esterno) S-Bloccaggio

SVJCR/L Kr: 93°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| SVJCR/L1010E11 | ● |       |   | 10              | 10 | 70  | 10 | 12 | 22 | VC**1103** |
| SVJCR/L1212F11 | ● | ●     |   | 12              | 12 | 80  | 12 | 16 | 27 | VC**1103** |
| SVJCR/L1616H11 | ● | ●     |   | 16              | 16 | 100 | 16 | 20 | 27 | VC**1103** |
| SVJCR/L2020K11 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 27 | VC**1103** |
| SVJCR/L2525M11 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 27 | VC**1103** |
| SVJCR/L1616H16 | ● | ●     |   | 16              | 16 | 100 | 16 | 20 | 36 | VC**1604** |
| SVJCR/L2020K16 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 41 | VC**1604** |
| SVJCR/L2020M16 | ● | ●     |   | 20              | 20 | 150 | 20 | 25 | 41 | VC**1604** |
| SVJCR/L2525M16 | ● | ●     |   | 25              | 25 | 150 | 20 | 32 | 41 | VC**1604** |
| SVJCR/L3225P16 | ○ | ○     |   | 32              | 25 | 170 | 32 | 32 | 41 | VC**1604** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                          |                         |                        |
|-------------------|--------------------------|-------------------------|------------------------|
|                   | Inserto                  | VC**1103**              | VC**1604**             |
|                   | h                        | 10-25                   | 16-32                  |
|                   | Vite                     | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x12<br>(2,7 Nm) |
|                   | Vite (sottoplacchetta)   |                         | SM5x8.65XA             |
|                   | Sottoplacchetta          |                         | V16BSC                 |
|                   | Chiave (vite)            | WT07IP                  | WT15IP                 |
|                   | Chiave (sottoplacchetta) |                         | WH35L                  |

| Inserto  |              |                 |          |
|----------|--------------|-----------------|----------|
|          |              |                 |          |
| Finitura | Media Lavor. | Lavorazione Al. | PCBN/PCD |
| A156     | A156         | A154            | A193     |

Codice sistema > A228

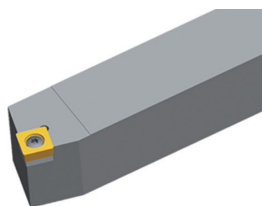
Scelta gradi > A42

Informazioni tecniche > A501

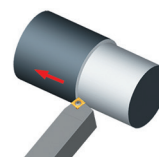
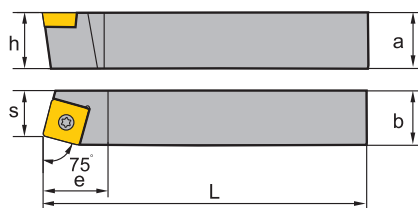
Dati di taglio > A366

## SC\*\* Barre alesatrici in acciaio S-Bloccaggio

SSBCR/L Kr: 75°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto                                                                             |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|-------------------------------------------------------------------------------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |  |
| SSBCR/L1212F09 |   | ●     | ● | 12              | 12 | 80  | 12 | 11 | 16 | SC**09T3**                                                                          |
| SSBCR/L1616H09 |   | ●     | ● | 16              | 16 | 100 | 16 | 13 | 16 | SC**09T3**                                                                          |
| SSBCR/L2020K12 |   | ●     | ● | 20              | 20 | 125 | 20 | 17 | 25 | SC**1204**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

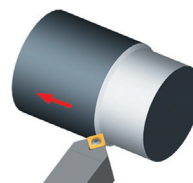
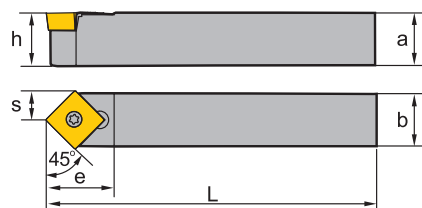
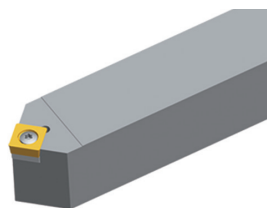
|                                                                                     | Inserto                  | SC**09T3**            | SC**09T3**            | SC**1204**            |
|-------------------------------------------------------------------------------------|--------------------------|-----------------------|-----------------------|-----------------------|
|                                                                                     | h                        | 12                    | 16                    | 20                    |
|  | Vite                     | I60M3,5x8<br>(2,7 Nm) | I60M3,5x8<br>(2,7 Nm) |                       |
|  | Vite                     |                       |                       | I60M4x11X<br>(3,4 Nm) |
|  | Vite (sottoplacchetta)   |                       | SM5x8.65XA            | SM6x10XA              |
|  | Sottoplacchetta          |                       | S09BS                 | S12BS                 |
|  | Chiave (vite)            | WT15IP                | WT15IP                | WT15IP                |
|  | Chiave (sottoplacchetta) |                       | WH35L                 | WH40L                 |

## Inserto

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |
| Finitura                                                                            | Media Lavor.                                                                        | Sgrossatura                                                                         | Lavorazione Al.                                                                     |
| A134                                                                                | A135                                                                                | A136                                                                                | A136                                                                                |

## SC\*\* Barre alesatrici in acciaio S-Bloccaggio

SSDCN Kr: 45°



Versione destra

| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |   |      | Inserto    |
|--------------|---|-------|-----------------|----|-----|----|---|------|------------|
|              |   |       | a               | b  | L   | h  | s | e    |            |
| SSDCN1212F09 | ● |       | 12              | 12 | 80  | 12 | 6 | 15,5 | SC**09T3** |
| SSDCN1616H09 | ● |       | 16              | 16 | 100 | 16 | 8 | 15,5 | SC**09T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

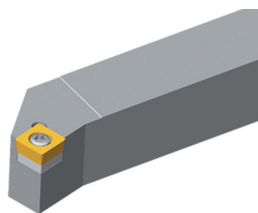
|  | Inserto                  | SC**09T3**            | SC**09T3**            |
|--|--------------------------|-----------------------|-----------------------|
|  | h                        | 12                    | 16                    |
|  | Vite                     | I60M3,5x8<br>(2,7 Nm) | I60M3,5x8<br>(2,7 Nm) |
|  | Vite (sottoplacchetta)   |                       | SM5x8.65XA            |
|  | Sottoplacchetta          |                       | S09BS                 |
|  | Chiave (vite)            | WT15IP                | WT15IP                |
|  | Chiave (sottoplacchetta) |                       | WH35L                 |

### Inserto

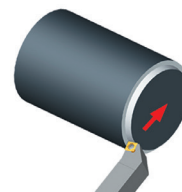
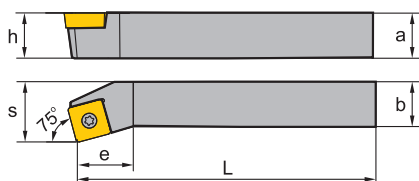
|          |              |             |                 |
|----------|--------------|-------------|-----------------|
|          |              |             |                 |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. |
| A134     | A135         | A136        | A136            |

## SC\*\* Barre alesatrici in acciaio S-Bloccaggio

SSKCR/L Kr: 75°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto                                                                             |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|-------------------------------------------------------------------------------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |  |
| SSKCR/L1616H09 |   | ●     | ● | 16              | 16 | 100 | 16 | 20 | 13 | SC**09T3**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|                                                                                     | Inserto                  | SC**09T3**            |
|-------------------------------------------------------------------------------------|--------------------------|-----------------------|
|                                                                                     | h                        | 16                    |
|   | Vite                     | I60M3,5x8<br>(2,7 Nm) |
|  | Vite (sottoplacchetta)   | SM5x8.65XA            |
|  | Sottoplacchetta          | S09BS                 |
|  | Chiave (vite)            | WT15IP                |
|  | Chiave (sottoplacchetta) | WH35L                 |

## Inserto

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |
| Finitura                                                                            | Media Lavor.                                                                        | Sgrossatura                                                                         | Lavorazione Al.                                                                     |
| A134                                                                                | A135                                                                                | A136                                                                                | A136                                                                                |

A

Tornitura

B

Fresatura

C

Foratura

D

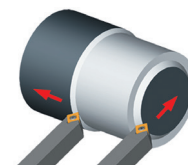
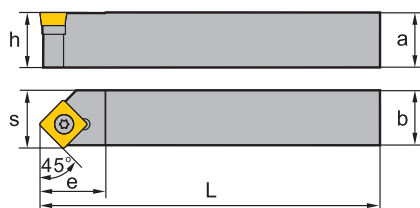
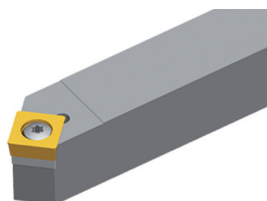
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## SC\*\* Barre alesatrici in acciaio S-Bloccaggio

SSSCR/L Kr: 45°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| SSSCR/L1616H09 | • | •     |   | 16              | 16 | 100 | 16 | 17 | 17 | SC**09T3** |
| SSSCR/L2020K12 | • | •     |   | 20              | 20 | 125 | 20 | 21 | 21 | SC**1204** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

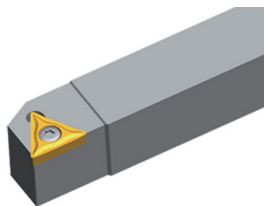
|  | Inserto                  | SC**09T3**             | SC**1204**            |
|--|--------------------------|------------------------|-----------------------|
|  | h                        | 16                     | 20                    |
|  | Vite                     | I60M3,5x12<br>(2,7 Nm) |                       |
|  | Vite                     |                        | I60M4x11X<br>(3,4 Nm) |
|  | Vite (sottoplacchetta)   |                        | SM6x10XA              |
|  | Sottoplacchetta          |                        | S12BS                 |
|  | Chiave (vite)            | WT15IP                 | WT15IP                |
|  | Chiave (sottoplacchetta) |                        | WH40L                 |

### Inserto

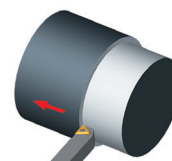
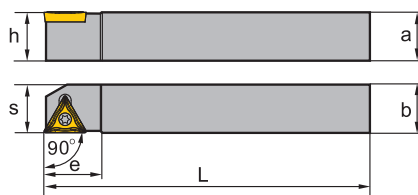
|                 |                     |                    |                        |
|-----------------|---------------------|--------------------|------------------------|
|                 |                     |                    |                        |
| <b>Finitura</b> | <b>Media Lavor.</b> | <b>Sgrossatura</b> | <b>Lavorazione Al.</b> |
| A134            | A135                | A136               | A136                   |

## TC\*\* Portautensile (esterno) S-Bloccaggio

STACR/L Kr: 90°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |    |    |      |    | Inserto                                                                             |
|----------------|---|-------|---|-----------------|----|----|----|------|----|-------------------------------------------------------------------------------------|
|                |   | R     | L | a               | b  | L  | h  | s    | e  |  |
| STACR/L1212F11 |   | ●     | ● | 12              | 12 | 80 | 12 | 12,5 | 14 | TC**1102**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio                                                                   |                |                         |
|-------------------------------------------------------------------------------------|----------------|-------------------------|
|                                                                                     | <b>Inserto</b> | <b>TC**1102**</b>       |
|                                                                                     | <b>h</b>       | <b>12</b>               |
|   | Vite           | I60M2,5×6,5<br>(1,0 Nm) |
|  | Chiave (vite)  | WT07IP                  |

| Inserto                                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| <b>Finitura</b>                                                                     | <b>Media Lavor.</b>                                                                 | <b>Sgrossatura</b>                                                                  | <b>Lavorazione Al.</b>                                                              | <b>PCBN/PCD</b>                                                                     |
| A141                                                                                | A142                                                                                | A143                                                                                | A145                                                                                | A187                                                                                |

A

Tornitura

B

Fresatura

C

Foratura

D

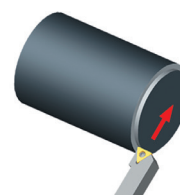
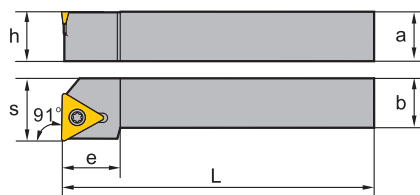
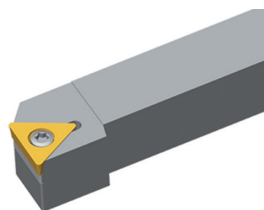
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## TC\*\* Portautensile (esterno) S-Bloccaggio

STFCR/L Kr: 91°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| STFCR/L1212F11 |   | ●     | ○ | 12              | 12 | 80  | 12 | 16 | 14 | TC**1102** |
| STFCR/L1616H11 |   | ●     | ○ | 16              | 16 | 100 | 16 | 20 | 14 | TC**1102** |
| STFCR/L1616H16 |   | ●     | ○ | 16              | 16 | 100 | 16 | 20 | 19 | TC**16T3** |
| STFCR/L2020K16 |   | ●     | ● | 20              | 20 | 125 | 20 | 25 | 19 | TC**16T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|  | Inserto                  | TC**1102**              | TC**16T3**             |
|--|--------------------------|-------------------------|------------------------|
|  | h                        | 12-16                   | 16-20                  |
|  | Vite                     | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x12<br>(2,7 Nm) |
|  | Vite (sottoplacchetta)   |                         | SM5x8.65XA             |
|  | Sottoplacchetta          |                         | T16BS                  |
|  | Chiave (vite)            | WT07IP                  | WT15IP                 |
|  | Chiave (sottoplacchetta) |                         | WH35L                  |

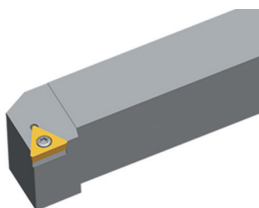
### Inserto

|          |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A141     | A142         | A143        | A145            | A143                 | A187     |

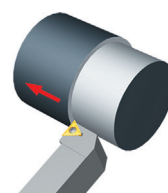
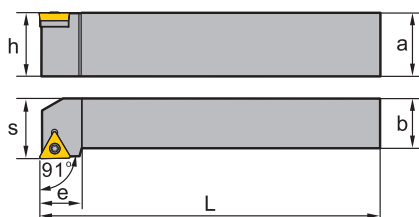


## TC\*\* Portautensile (esterno) S-Bloccaggio

STGCR/L Kr: 91°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto                                                                             |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|-------------------------------------------------------------------------------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |  |
| STGCR/L0808D09 | ○ |       |   | 8               | 8  | 60  | 8  | 10 | 11 | TC**0902**                                                                          |
| STGCR/L1010E09 | ● | ○     |   | 10              | 10 | 70  | 10 | 12 | 11 | TC**0902**                                                                          |
| STGCR/L1212F11 | ● | ●     |   | 12              | 12 | 80  | 12 | 16 | 14 | TC**1102**                                                                          |
| STGCR/L1616H11 | ● | ●     |   | 16              | 16 | 100 | 16 | 20 | 16 | TC**1102**                                                                          |
| STGCR/L2020K16 | ● | ●     |   | 20              | 20 | 125 | 20 | 25 | 21 | TC**16T3**                                                                          |
| STGCR/L2525M16 | ● | ●     |   | 25              | 25 | 150 | 25 | 25 | 21 | TC**16T3**                                                                          |

● In magazzino ○ Su richiesta

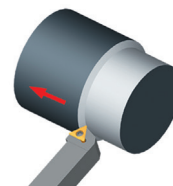
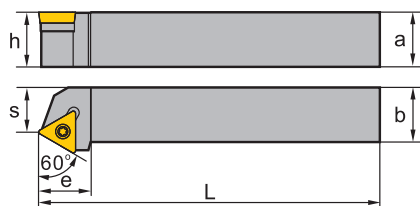
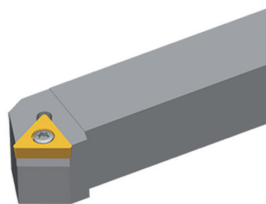
\* Con raffreddamento interno

| Parti di ricambio                                                                   |                              |                         |                         |                        |
|-------------------------------------------------------------------------------------|------------------------------|-------------------------|-------------------------|------------------------|
|                                                                                     | Inserto                      | TC**0902**              | TC**1102**              | TC**16T3**             |
|                                                                                     | h                            | 8-10                    | 12-16                   | 20-25                  |
|  | Vite                         | I60M2,2x5,5<br>(0,8 Nm) | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x12<br>(2,7 Nm) |
|  | Vite (sottopla-<br>chetta)   |                         |                         | SM5x8.65XA             |
|  | Sottoplachetta               |                         |                         | T16BS                  |
|  | Chiave (vite)                | WT06IP                  | WT07IP                  | WT15IP                 |
|  | Chiave (sotto-<br>plachetta) |                         |                         | WH35L                  |

| Inserto                                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Finitura                                                                            | Media Lavor.                                                                        | Sgrossatura                                                                         | Lavorazione Al.                                                                     | Lavor.- ghisa grigia                                                                | PCBN/PCD                                                                              |
| A141                                                                                | A142                                                                                | A143                                                                                | A145                                                                                | A143                                                                                | A187                                                                                  |

## TC\*\* Portautensile (esterno) S-Bloccaggio

STTCR/L Kr: 60°



Versione destra

| Articolo       | *   | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|-----|-------|---|-----------------|----|-----|----|----|----|------------|
|                |     | R     | L | a               | b  | L   | h  | s  | e  |            |
| STTCR/L1616H11 | ● ○ |       |   | 16              | 16 | 100 | 16 | 13 | 14 | TC**1102** |
| STTCR/L1616H16 | ● ● |       |   | 16              | 16 | 100 | 16 | 13 | 19 | TC**16T3** |
| STTCR/L2020K16 | ● ● |       |   | 20              | 20 | 125 | 20 | 17 | 19 | TC**16T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

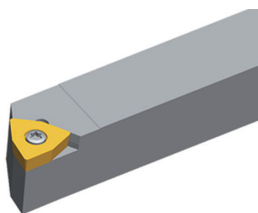
|  | Inserto                  | TC**1102**              | TC**16T3**             |
|--|--------------------------|-------------------------|------------------------|
|  | h                        | 16                      | 16-20                  |
|  | Vite                     | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x12<br>(2,7 Nm) |
|  | Vite (sottoplacchetta)   |                         | SM5x8.65XA             |
|  | Sottoplacchetta          |                         | T16BS                  |
|  | Chiave (vite)            | WT07IP                  | WT15IP                 |
|  | Chiave (sottoplacchetta) |                         | WH35L                  |

### Inserto

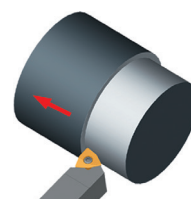
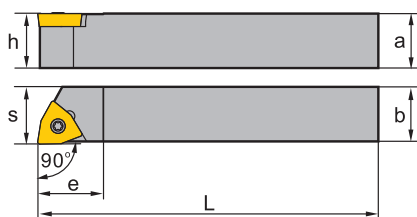
|          |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A141     | A142         | A143        | A145            | A143                 | A187     |

## WC\*\* Portautensile (esterno) S-Bloccaggio

SWACR/L Kr: 90°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |      |    | Inserto                                                                             |
|----------------|---|-------|---|-----------------|----|-----|----|------|----|-------------------------------------------------------------------------------------|
|                |   | R     | L | a               | b  | L   | h  | s    | e  |  |
| SWACR/L1010E04 |   | ●     | ○ | 10              | 10 | 70  | 10 | 10,5 | 10 | WC**0402**                                                                          |
| SWACR/L1212F04 |   | ●     | ○ | 12              | 12 | 80  | 12 | 12   | 14 | WC**0402**                                                                          |
| SWACR/L1616H06 |   | ●     | ● | 16              | 16 | 100 | 16 | 16,5 | 20 | WC**06T3**                                                                          |
| SWACR/L2020K08 |   | ●     | ● | 20              | 20 | 125 | 20 | 20,5 | 24 | WC**0804**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|                                                                                     | Inserto       | WC**0402**              | WC**06T3**          | WC**0804**             |
|-------------------------------------------------------------------------------------|---------------|-------------------------|---------------------|------------------------|
|                                                                                     | h             | 10-12                   | 16                  | 20                     |
|  | Vite          | I60M2,5×6,5<br>(1,0 Nm) | I60M3×7<br>(1,8 Nm) | I60M3,5×12<br>(2,7 Nm) |
|  | Chiave (vite) | WT07IP                  | WT10IP              | WT15IP                 |

## Inserto



Media Lavor.

C35

A

Tornitura

B

Fresatura

C

Foratura

D

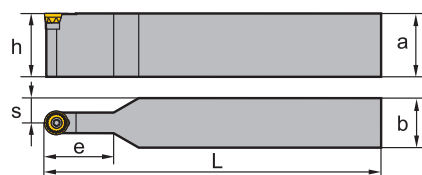
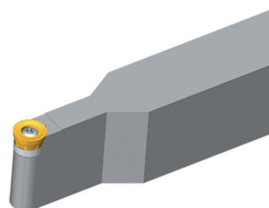
Informazioni  
tecniche

E

Indice

## RC\*\* Portautensile (esterno) **S-Bloccaggio**

SRDCN



| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |      |    | Inserto                                                                             |                                                                                     |
|--------------|---|-------|-----------------|----|-----|----|------|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|              |   |       | a               | b  | L   | h  | s    | e  |  |  |
| SRDCN1616H08 |   | ○     | 16              | 16 | 100 | 16 | 8    | 16 | RCGX0803MO                                                                          | RCMT0803MO                                                                          |
| SRDCN2020K08 |   | ●     | 20              | 20 | 125 | 20 | 10   | 16 | RCGX0803MO                                                                          | RCMT0803MO                                                                          |
| SRDCN2020K12 |   | ●     | 20              | 20 | 125 | 20 | 10   | 35 | RCGX1204MO                                                                          | RCMT1204MO                                                                          |
| SRDCN2525M12 |   | ●     | 25              | 25 | 150 | 25 | 12,5 | 35 | RCGX1204MO                                                                          | RCMT1204MO                                                                          |
| SRDCN3225P12 |   | ●     | 32              | 25 | 170 | 32 | 12,5 | 35 | RCGX1204MO                                                                          | RCMT1204MO                                                                          |
| SRDCN2020K10 |   | ●     | 20              | 20 | 125 | 20 | 10   | 25 | RCMT10T3MO                                                                          |                                                                                     |
| SRDCN2525M10 |   | ●     | 25              | 25 | 150 | 25 | 12,5 | 25 | RCMT10T3MO                                                                          |                                                                                     |
| SRDCN3225P16 |   | ●     | 32              | 25 | 170 | 32 | 12,5 | 35 | RCMT1606MO                                                                          |                                                                                     |
| SRDCN3232P16 |   | ●     | 32              | 32 | 170 | 32 | 16   | 40 | RCMT1606MO                                                                          |                                                                                     |
| SRDCN4040S16 |   | ●     | 40              | 40 | 250 | 40 | 20   | 50 | RCMT1606MO                                                                          |                                                                                     |
| SRDCN4040S20 |   | ●     | 40              | 40 | 250 | 40 | 20   | 50 | RCMT2006MO                                                                          |                                                                                     |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio                                                                   |                          |                     |                        |                        |                       |                      |
|-------------------------------------------------------------------------------------|--------------------------|---------------------|------------------------|------------------------|-----------------------|----------------------|
|                                                                                     | Inserto                  | RCGX0803MO          | RCGX1204MO             | RCMT10T3MO             | RCMT1606MO            | RCMT2006MO           |
|                                                                                     | h                        | 16-20               | 20-32                  | 20-25                  | 32-40                 | 40                   |
|  | Vite                     | I60M3×7<br>(1,8 Nm) | I60M3,5×12<br>(2,7 Nm) | I60M3,5×10<br>(2,7 Nm) |                       | I43M6×16<br>(9,1 Nm) |
|  | Vite                     |                     |                        |                        | I60M4×15X<br>(3,4 Nm) |                      |
|  | Vite (sottoplacchetta)   |                     | SM5×8.65XA             |                        | SM6×10XA              |                      |
|  | Sottoplacchetta          |                     | R12BS                  |                        | R16BS                 |                      |
|  | Chiave (vite)            | WT10IP              | WT15IP                 | WT15IP                 | WT15IP                |                      |
|  | Chiave (vite)            |                     |                        |                        |                       | WT25IT               |
|  | Chiave (sottoplacchetta) |                     | WH35L                  |                        | WH40L                 |                      |

| Inserto                                                                             |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |
| Lavorazione Al.                                                                     | Lavor. ghisa grigia                                                                 |
| A132                                                                                | A132                                                                                |

Codice sistema > A228

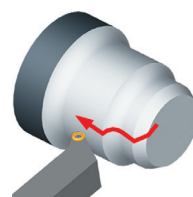
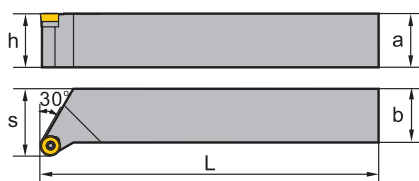
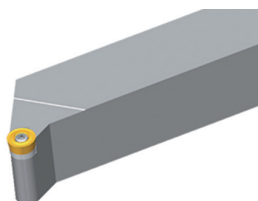
Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366

## RC\*\* Portautensile (esterno) S-Bloccaggio

SRGCR/L



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    | Inserto                                                                             |                                                                                     |
|----------------|---|-------|---|-----------------|----|-----|----|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                |   | R     | L | a               | b  | L   | h  | s  |  |  |
| SRGCR/L1616H08 |   | ●     | ● | 16              | 16 | 100 | 16 | 20 | RCGX0803MO-LH                                                                       | RCMT0803MO                                                                          |
| SRGCR/L2020K12 |   | ●     | ○ | 20              | 20 | 125 | 20 | 27 | RCGX1204MO                                                                          | RCMT1204MO                                                                          |
| SRGCR/L2525M12 |   | ●     | ○ | 25              | 25 | 150 | 25 | 32 | RCGX1204MO                                                                          | RCMT1204MO                                                                          |
| SRGCR/L2525M10 |   | ●     | ○ | 25              | 25 | 100 | 25 | 32 | RCMT10T3MO                                                                          |                                                                                     |
| SRGCR/L2020K10 |   | ●     | ○ | 20              | 20 | 125 | 20 | 25 | RCMT10T3MO                                                                          |                                                                                     |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

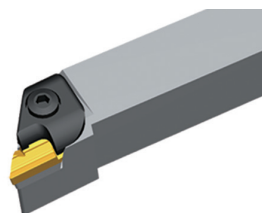
|                                                                                     | Inserto                      | RCGX0803MO-LH          | RCGX1204MO             | RCMT10T3MO             |
|-------------------------------------------------------------------------------------|------------------------------|------------------------|------------------------|------------------------|
|                                                                                     | h                            | 16                     | 20-25                  | 16-25                  |
|  | Vite                         | I60M3,5×10<br>(2,7 Nm) | I60M3,5×12<br>(2,7 Nm) | I60M3,5×10<br>(2,7 Nm) |
|  | Vite (sottopla-<br>chetta)   |                        | SM5×8.65XA             |                        |
|  | Sottoplachetta               |                        | R12BS                  |                        |
|  | Chiave (vite)                | WT15IP                 | WT15IP                 | WT15IP                 |
|  | Chiave (sotto-<br>plachetta) |                        | WH35L                  |                        |

## Inserto

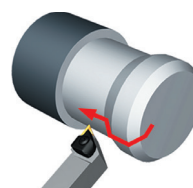
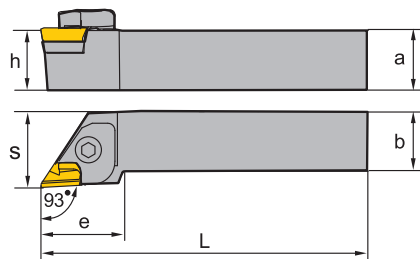
|                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |
| Lavorazione Al.                                                                     | Lavor.- ghisa grigia                                                                |
| A132                                                                                | A132                                                                                |

## KNUX\*\* Portautensile C-Bloccaggio

CKJNR/L Kr: 93°



Versione destra



| Articolo     | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto     |
|--------------|---|-------|---|-----------------|----|-----|----|----|----|-------------|
|              |   | R     | L | a               | b  | L   | h  | s  | e  |             |
| CKJNL2525M16 | ● |       |   | 25              | 25 | 150 | 25 | 32 | 32 | KNUX1604**L |
| CKJNL3232P16 | ● |       |   | 32              | 32 | 170 | 32 | 40 | 32 | KNUX1604**L |
| CKJNL4040R16 | ● |       |   | 40              | 40 | 200 | 40 | 50 | 32 | KNUX1604**L |
| CKJNR2525M16 | ● |       |   | 25              | 25 | 150 | 25 | 32 | 32 | KNUX1604**R |
| CKJNR3232P16 | ● |       |   | 32              | 32 | 170 | 32 | 40 | 32 | KNUX1604**R |
| CKJNR4040R16 | ○ |       |   | 40              | 40 | 200 | 40 | 50 | 32 | KNUX1604**R |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                          |                     |                     |
|-------------------|--------------------------|---------------------|---------------------|
|                   | Inserto                  | KNUX1604**L         | KNUX1604**R         |
|                   | h                        | 25-40               | 25-40               |
|                   | Staffa                   | C6L1T               | C6R1T               |
|                   | Perno passante           | P0515               | P0515               |
|                   | Vite (staffa)            | CM6x25A<br>(7,0 Nm) | CM6x25A<br>(7,0 Nm) |
|                   | Vite (sottoplacchetta)   | SM3x10B             | SM3x10B             |
|                   | Sottoplacchetta          |                     | K16CC               |
|                   | Sottoplacchetta          | K16CCL              |                     |
|                   | Molla (staffa)           | SPR1                | SPR1                |
|                   | Perno passante           | SPR2                | SPR2                |
|                   | Chiave (staffa)          | WH40L               | WH40L               |
|                   | Chiave (sottoplacchetta) | WH20L               | WH20L               |

Inserto



Finitura

A113

Codice sistema > A228

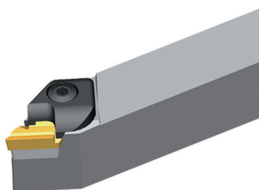
Scelta gradi > A42

Informazioni tecniche > A501

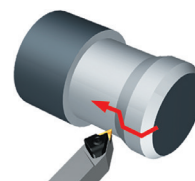
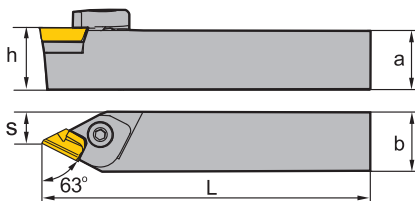
Dati di taglio > A366

## KNUX\*\* Portautensile C-Bloccaggio

CKNNR/L Kr: 63°



Versione destra



| Articolo     | * | Stock |   | Dimensioni [mm] |    |     |    |      | Inserto     |
|--------------|---|-------|---|-----------------|----|-----|----|------|-------------|
|              |   | R     | L | a               | b  | L   | h  | s    |             |
| CKNNL2525M16 | ● |       |   | 25              | 25 | 150 | 25 | 14,3 | KNUX1604**L |
| CKNNL3232P16 | ○ |       |   | 32              | 32 | 170 | 32 | 16,8 | KNUX1604**L |
| CKNNR2525M16 | ● |       |   | 25              | 25 | 150 | 25 | 14,3 | KNUX1604**R |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|  | Inserto                  | KNUX1604**L         | KNUX1604**R         |
|--|--------------------------|---------------------|---------------------|
|  | h                        | 25-32               | 25-32               |
|  | Staffa                   | C6L1T               | C6R1T               |
|  | Perno passante           | P0515               | P0515               |
|  | Vite (staffa)            | CM6×25A<br>(7,0 Nm) | CM6×25A<br>(7,0 Nm) |
|  | Vite (sottoplacchetta)   | SM3×10B             | SM3×10B             |
|  | Sottoplacchetta          |                     | K16CC               |
|  | Sottoplacchetta          | K16CCL              |                     |
|  | Molla (staffa)           | SPR1                | SPR1                |
|  | Perno passante           | SPR2                | SPR2                |
|  | Chiave (staffa)          | WH40L               | WH40L               |
|  | Chiave (sottoplacchetta) | WH20L               | WH20L               |

## Inserto



## Finitura

A113

Codice sistema &gt; A228

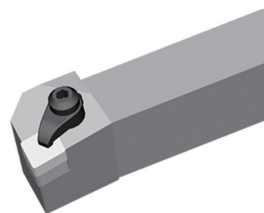
Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

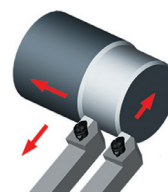
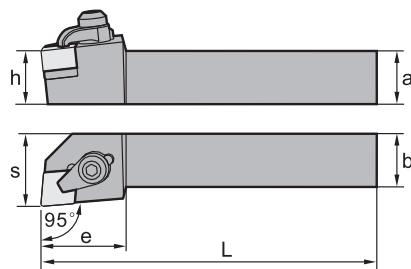
Dati di taglio &gt; A366

## CN\*\* Portautensile (esterno) **C-Bloccaggio**

CCLNR/L Kr: 95°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |            |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |            |
| CCLNR/L2020K12 |   | ○     | ○ | 20              | 20 | 125 | 20 | 27 | 32 | CNGN1204** | CNGN1207** |
| CCLNR/L2525M12 |   | ○     | ● | 25              | 20 | 100 | 25 | 27 | 36 | CNGN1204** | CNGN1207** |
| CCLNR/L2525M16 |   | ○     | ○ | 25              | 25 | 150 | 25 | 32 | 36 | CNGN1604** | CNGN1606** |
| CCLNR/L3225P16 |   | ○     | ○ | 32              | 25 | 170 | 32 | 32 | 36 | CNGN1604** | CNGN1606** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                          |                     |                     |                      |                      |
|-------------------|--------------------------|---------------------|---------------------|----------------------|----------------------|
|                   | Inserto                  | CNGN1204**          | CNGN1207**          | CNGN1604**           | CNGN1606**           |
|                   | h                        | 20-25               | 20-25               | 25-32                | 25-32                |
|                   | Staffa                   | C1RC                | C1RC                | C2RC                 | C2RC                 |
|                   | Vite (staffa)            | CM6×30B<br>(7,0 Nm) | CM6×30B<br>(7,0 Nm) | CM8×30B<br>(10,2 Nm) | CM8×30B<br>(10,2 Nm) |
|                   | Vite (sottoplacchetta)   | SM3×10B             | SM3×10B             | SM4×12B              | SM4×12B              |
|                   | Sottoplacchetta          | C12CC-04            | C12CC-07            | C16CC-04             | C16CC-06             |
|                   | Molla                    | SPR1                | SPR1                | SPR3                 | SPR3                 |
|                   | Chiave (staffa)          | WH40L               | WH40L               | WH50L                | WH50L                |
|                   | Chiave (sottoplacchetta) | WH20L               | WH20L               | WH30L                | WH30L                |

Inserto



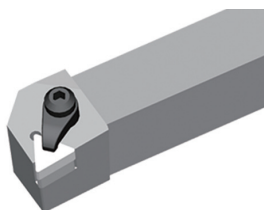
PCBN/PCD

A173

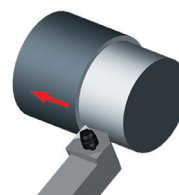
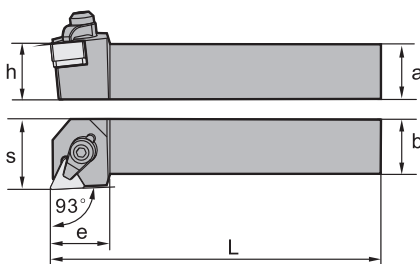


## TN\*\* Portautensile (esterno) C-Bloccaggio

CTJNR/L Kr: 93°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto                                                                             |                                                                                     |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |  |  |
| CTJNR/L2020K16 |   | ○     | ○ | 20              | 20 | 125 | 20 | 25 | 30 | TNGN1604**                                                                          | TNGN1607**                                                                          |
| CTJNR/L2525M16 |   | ○     | ○ | 25              | 25 | 150 | 25 | 32 | 30 | TNGN1604**                                                                          | TNGN1607**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|                                                                                     | Inserto                  | TNGN1604**          | TNGN1607**          |
|-------------------------------------------------------------------------------------|--------------------------|---------------------|---------------------|
|                                                                                     | h                        | 20-25               | 20-25               |
|  | Staffa                   | C1RC                | C1RC                |
|  | Vite (staffa)            | CM6×30B<br>(7,0 Nm) | CM6×30B<br>(7,0 Nm) |
|  | Vite (sottoplacchetta)   | SM3×10B             | SM3×10B             |
|  | Sottoplacchetta          | T16CC-04            | T16CC-07            |
|  | Molla                    | SPR1                | SPR1                |
|  | Chiave (staffa)          | WH40L               | WH40L               |
|  | Chiave (sottoplacchetta) | WH20L               | WH20L               |

Inserto

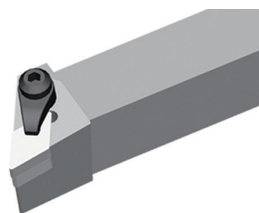


Media Lavor.

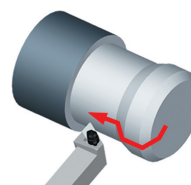
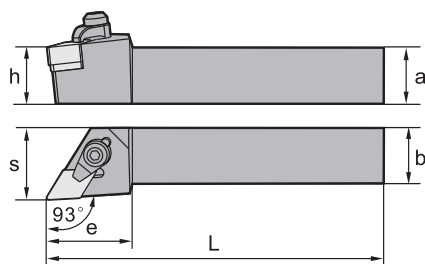
A215

## DN\*\* Portautensile (esterno) C-Bloccaggio

CDJNR/L Kr: 93°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |            |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |            |
| CDJNR/L2525M15 | ● | ●     |   | 25              | 25 | 150 | 25 | 32 | 32 | DNGN1504** | DNGN1507** |
| CDJNR/L3225P15 | ○ | ○     |   | 32              | 25 | 170 | 32 | 32 | 32 | DNGN1504** | DNGN1507** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|  | Inserto                  | DNGN1504**          | DNGN1507**          |
|--|--------------------------|---------------------|---------------------|
|  | h                        | 25-32               | 25-32               |
|  | Staffa                   | C1RC                | C1RC                |
|  | Vite (staffa)            | CM6×30B<br>(7,0 Nm) | CM6×30B<br>(7,0 Nm) |
|  | Vite (sottoplacchetta)   | SM3×10B             | SM3×10B             |
|  | Sottoplacchetta          | D15CC-04            | D15CC-07            |
|  | Molla                    | SPR1                | SPR1                |
|  | Chiave (staffa)          | WH40L               | WH40L               |
|  | Chiave (sottoplacchetta) | WH20L               | WH20L               |

Inserto

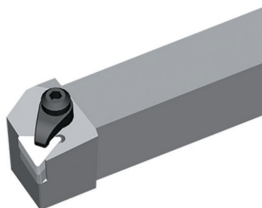


Media Lavor.

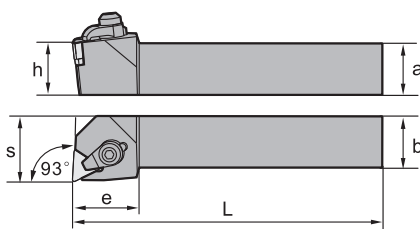
A205

## TN\*\* Portautensile (esterno) C-Bloccaggio

CTUNR/L Kr: 93°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto                                                                             |                                                                                     |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |  |  |
| CTUNR/L2525M16 |   | ○     | ○ | 25              | 25 | 150 | 25 | 32 | 27 | TNGN1604**                                                                          | TNGN1607**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio                                                                   |                          |                     |                     |
|-------------------------------------------------------------------------------------|--------------------------|---------------------|---------------------|
|                                                                                     | Inserto                  | TNGN1604**          | TNGN1607**          |
|                                                                                     | h                        | 20-25               | 20-25               |
|   | Staffa                   | C1RC                | C1RC                |
|  | Vite (staffa)            | CM6×30B<br>(7,0 Nm) | CM6×30B<br>(7,0 Nm) |
|  | Vite (sottoplacchetta)   | SM3×10B             | SM3×10B             |
|  | Sottoplacchetta          | T16CC-04            | T16CC-07            |
|  | Molla                    | SPR1                | SPR1                |
|  | Chiave (staffa)          | WH40L               | WH40L               |
|  | Chiave (sottoplacchetta) | WH20L               | WH20L               |

| Inserto                                                                             |
|-------------------------------------------------------------------------------------|
|  |
| Media Lavor.<br>A215                                                                |

A

Tornitura

B

Fresatura

C

Foratura

D

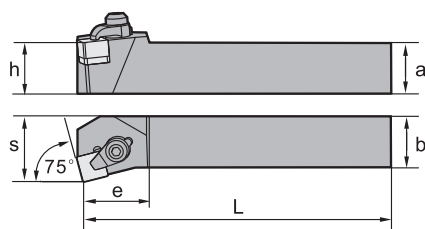
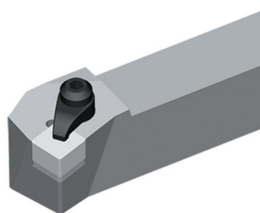
Informazioni  
tecniche

E

Indice

## SN\*\* Portautensile (esterno) C-Bloccaggio

CSKNR/L Kr: 75°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |            |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |            |
| CSKNR/L2020K12 |   | ○     | ○ | 20              | 20 | 125 | 20 | 25 | 25 | SNGN1204** | SNGN1207** |
| CSKNR/L2525M12 |   | ○     | ○ | 25              | 25 | 170 | 25 | 32 | 25 | SNGN1204** | SNGN1207** |
| CSKNR/L3225P12 |   | ○     | ○ | 32              | 25 | 170 | 32 | 32 | 25 | SNGN1204** | SNGN1207** |
| CSKNR/L3225P15 |   | ○     | ○ | 32              | 25 | 170 | 32 | 32 | 32 | SNGN1507** |            |

● In magazzino ○ Su richiesta

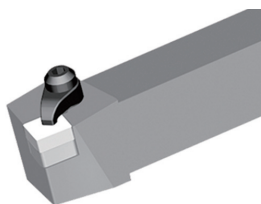
\* Con raffreddamento interno

| Parti di ricambio |                          |                     |                     |                      |
|-------------------|--------------------------|---------------------|---------------------|----------------------|
|                   | Inserto                  | SNGN1204**          | SNGN1207**          | SNGN1507**           |
|                   | h                        | 20-32               | 20-32               | 32                   |
|                   | Staffa                   | C1RC                | C1RC                | C2RC                 |
|                   | Vite (staffa)            | CM6×30B<br>(7,0 Nm) | CM6×30B<br>(7,0 Nm) | CM8×30B<br>(10,2 Nm) |
|                   | Vite (sottoplacchetta)   | SM3×10B             | SM3×10B             | SM4×12B              |
|                   | Sottoplacchetta          | S12CC-04            | S12CC-07            | S15CC-07             |
|                   | Molla                    | SPR1                | SPR1                | SPR3                 |
|                   | Chiave (staffa)          | WH40L               | WH40L               | WH50L                |
|                   | Chiave (sottoplacchetta) | WH20L               | WH20L               | WH30L                |

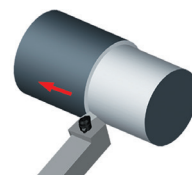
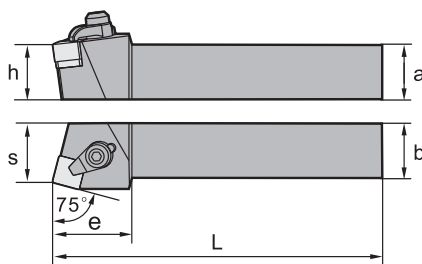
| Inserto              |          |
|----------------------|----------|
|                      |          |
| Lavor.- ghisa grigia | PCBN/PCD |
| A86                  | A175     |

## SN\*\* Portautensile (esterno) C-Bloccaggio

CSRRN/L Kr: 75°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |            |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |            |
| CSRRN/L2020K12 |   | ○     | ○ | 20              | 20 | 125 | 20 | 22 | 32 | SNGN1204** | SNGN1207** |
| CSRRN/L2525M12 |   | ○     | ○ | 25              | 20 | 100 | 25 | 27 | 32 | SNGN1204** | SNGN1207** |
| CSRRN/L3225P12 |   | ○     | ○ | 32              | 25 | 170 | 32 | 27 | 32 | SNGN1204** | SNGN1207** |
| CSRRN/L3225P15 |   | ○     |   | 32              | 25 | 170 | 32 | 32 | 40 | SNGN1507** |            |
| CSRRN/L4040R15 |   | ○     | ○ | 40              | 40 | 200 | 40 | 43 | 40 | SNGN1507** |            |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|                          | Inserto<br>h | SNGN1204**<br>20-32 | SNGN1207**<br>20-32 | SNGN1507**<br>32-40  |
|--------------------------|--------------|---------------------|---------------------|----------------------|
| Staffa                   |              | C1RC                | C1RC                | C2RC                 |
| Vite (staffa)            |              | CM6×30B<br>(7,0 Nm) | CM6×30B<br>(7,0 Nm) | CM8×30B<br>(10,2 Nm) |
| Vite (sottoplacchetta)   |              | SM3×10B             | SM3×10B             | SM4×12B              |
| Sottoplacchetta          |              | S12CC-04            | S12CC-07            | S15CC-07             |
| Molla                    |              | SPR1                | SPR1                | SPR3                 |
| Chiave (staffa)          |              | WH40L               | WH40L               | WH50L                |
| Chiave (sottoplacchetta) |              | WH20L               | WH20L               | WH30L                |

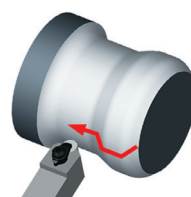
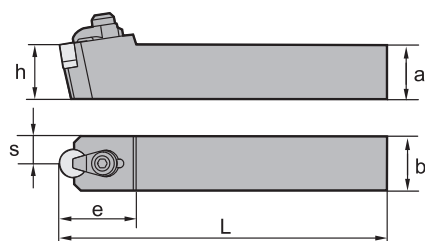
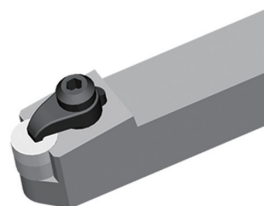
## Inserto

|                             |                  |
|-----------------------------|------------------|
|                             |                  |
| Lavor.- ghisa grigia<br>A86 | PCBN/PCD<br>A175 |

## RN\*\* Portautensile (esterno)

### C-Bloccaggio

CRDNN



| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |      |    | Inserto    |            |
|--------------|---|-------|-----------------|----|-----|----|------|----|------------|------------|
|              |   |       | a               | b  | L   | h  | s    | e  |            |            |
| CRDNN2020K12 |   | ○     | 20              | 20 | 125 | 20 | 10   | 32 | RNGN1204** | RNGN1207** |
| CRDNN2525M12 |   | ○     | 25              | 25 | 150 | 25 | 12,5 | 32 | RNGN1204** | RNGN1207** |
| CRDNN3225P12 |   | ○     | 32              | 25 | 170 | 32 | 12,5 | 32 | RNGN1204** | RNGN1207** |
| CRDNN3232P15 |   | ○     | 32              | 32 | 170 | 32 | 17,5 | 40 | RNGN1507** |            |
| CRDNN4040R15 |   | ○     | 40              | 40 | 200 | 40 | 20   | 40 | RNGN1507** |            |

● In magazzino ○ Su richiesta

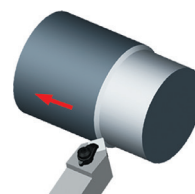
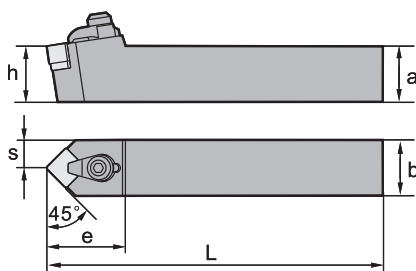
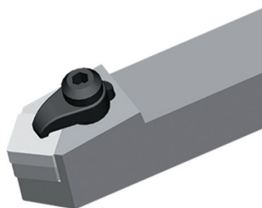
\* Con raffreddamento interno

| Parti di ricambio |                          |                     |                     |                      |
|-------------------|--------------------------|---------------------|---------------------|----------------------|
|                   | Inserto                  | RNGN1204**          | RNGN1207**          | RNGN1507**           |
|                   | h                        | 20-32               | 20-32               | 32-40                |
|                   | Staffa                   | C1RC                | C1RC                | C2RC                 |
|                   | Vite (staffa)            | CM6×30B<br>(7,0 Nm) | CM6×30B<br>(7,0 Nm) | CM8×30B<br>(10,2 Nm) |
|                   | Vite (sottoplacchetta)   | SM3×10B             | SM3×10B             | SM4×12B              |
|                   | Sottoplacchetta          | R12CC-04            | R12CC-07            | R15CC-07             |
|                   | Molla                    | SPR1                | SPR1                | SPR3                 |
|                   | Chiave (staffa)          | WH40L               | WH40L               | WH50L                |
|                   | Chiave (sottoplacchetta) | WH20L               | WH20L               | WH30L                |

| Inserto  |
|----------|
|          |
| PCBN/PCD |
| A174     |

**SN\*\* Portautensile (esterno) C-Bloccaggio**

CSDNN Kr: 45°



| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |      |    | Inserto                                                                             |                                                                                     |
|--------------|---|-------|-----------------|----|-----|----|------|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|              |   |       | a               | b  | L   | h  | s    | e  |  |  |
| CSDNN2020K12 |   | ○     | 20              | 20 | 125 | 20 | 10   | 35 | SNGN1204**                                                                          | SNGN1207**                                                                          |
| CSDNN2525M12 |   | ●     | 25              | 25 | 150 | 25 | 12,5 | 30 | SNGN1204**                                                                          | SNGN1207**                                                                          |
| CSDNN3225P12 |   | ○     | 32              | 25 | 170 | 32 | 12,5 | 35 | SNGN1204**                                                                          | SNGN1207**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio                                                                   |                          |                     |                     |
|-------------------------------------------------------------------------------------|--------------------------|---------------------|---------------------|
|                                                                                     | Inserto                  | SNGN1204**          | SNGN1207**          |
|                                                                                     | h                        | 20-32               | 20-32               |
|  | Staffa                   | C1RC                | C1RC                |
|  | Vite (staffa)            | CM6×30B<br>(7,0 Nm) | CM6×30B<br>(7,0 Nm) |
|  | Vite (sottoplacchetta)   | SM3×10B             | SM3×10B             |
|  | Sottoplacchetta          | S12CC-04            | S12CC-07            |
|  | Molla                    | SPR1                | SPR1                |
|  | Chiave (staffa)          | WH40L               | WH40L               |
|  | Chiave (sottoplacchetta) | WH20L               | WH20L               |

| Inserto                                                                             |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |
| Lavor.- ghisa grigia<br>A86                                                         | PCBN/PCD<br>A175                                                                    |

Codice sistema &gt; A228

Scelta gradi &gt; A42

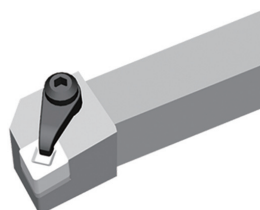
Informazioni tecniche &gt; A501

Dati di taglio &gt; A366

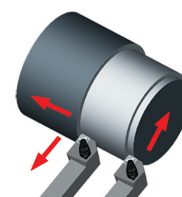
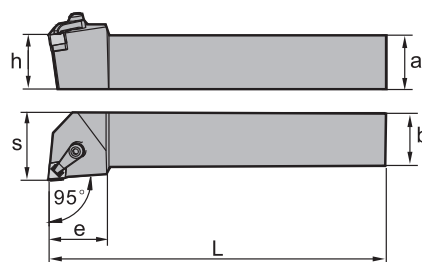
## CN\*\* Portautensile (esterno)

### J-Bloccaggio

JCLNR/L Kr: 95°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto    |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |            |
| JCLNR/L2020K12 | ○ | ○     |   | 20              | 20 | 125 | 20 | 29 | 32 | CNGX1207** |
| JCLNR/L2525M12 | ○ | ○     |   | 25              | 25 | 150 | 25 | 32 | 32 | CNGX1207** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

#### Parti di ricambio

|  | Inserto                  | CNGX1207**          |
|--|--------------------------|---------------------|
|  | h                        | 20-25               |
|  | Staffa                   | C1RJ                |
|  | Vite (staffa)            | CM6×30B<br>(7,0 Nm) |
|  | Vite (sottoplacchetta)   | SM3×10B             |
|  | Sottoplacchetta          | C12CC-07            |
|  | Molla                    | SPR1                |
|  | Chiave (staffa)          | WH40L               |
|  | Chiave (sottoplacchetta) | WH20L               |

#### Inserto



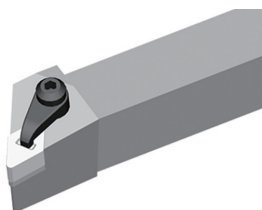
Media Lavor.

A203

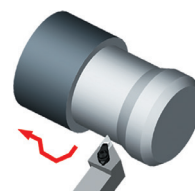
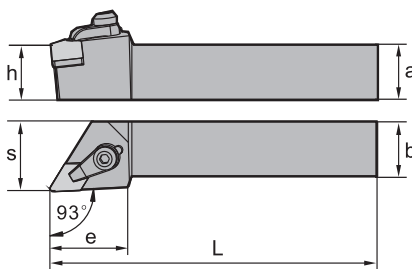


## DN\*\* Portautensile (esterno) J-Bloccaggio

JDJNR/L Kr: 93°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |     |    |    |    | Inserto                                                                             |
|----------------|---|-------|---|-----------------|----|-----|----|----|----|-------------------------------------------------------------------------------------|
|                |   | R     | L | a               | b  | L   | h  | s  | e  |  |
| JDJNR/L2525M15 | ● | ○     |   | 25              | 25 | 150 | 25 | 32 | 38 | DNGX1507**                                                                          |
| JDJNR/L3225P15 | ○ | ○     |   | 32              | 25 | 170 | 32 | 32 | 38 | DNGX1507**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|                                                                                     | Inserto                  | DNGX1507**          |
|-------------------------------------------------------------------------------------|--------------------------|---------------------|
|                                                                                     | h                        | 25-32               |
|  | Staffa                   | C1RJ                |
|  | Vite (staffa)            | CM6×30B<br>(7,0 Nm) |
|  | Vite (sottoplacchetta)   | SM3×10B             |
|  | Sottoplacchetta          | D15CC-07            |
|  | Molla                    | SPR1                |
|  | Chiave (staffa)          | WH40L               |
|  | Chiave (sottoplacchetta) | WH20L               |

## Inserto

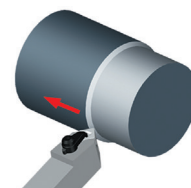
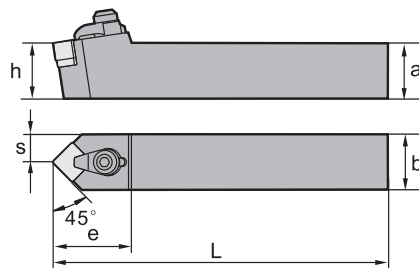
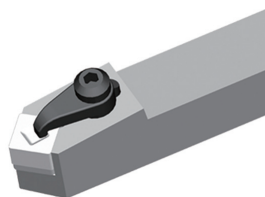


Media Lavor.

A206

## SN\*\* Portautensile (esterno) J-Bloccaggio

JSDNN Kr: 45°



| Articolo     | * | Stock | Dimensioni [mm] |    |     |    |      |    | Inserto    |
|--------------|---|-------|-----------------|----|-----|----|------|----|------------|
|              |   |       | a               | b  | L   | h  | s    | e  |            |
| JSDNN2525M12 | ○ |       | 25              | 25 | 150 | 25 | 12,5 | 40 | SNGX1207** |
| JSDNN3225P12 | ○ |       | 32              | 25 | 170 | 32 | 12,5 | 40 | SNGX1207** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|  | Inserto                  | SNGX1207**          |
|--|--------------------------|---------------------|
|  | h                        | 20-32               |
|  | Staffa                   | C1RJ                |
|  | Vite (staffa)            | CM6×30B<br>(7,0 Nm) |
|  | Vite (sottoplacchetta)   | SM3×10B             |
|  | Sottoplacchetta          | S12CC-07            |
|  | Molla                    | SPR1                |
|  | Chiave (staffa)          | WH40L               |
|  | Chiave (sottoplacchetta) | WH20L               |

Inserto



Media Lavor.

A213



**S C L N L 25 25 M 12 – S C**

**1 2 3 4 5 6 7 8 9 10 11**

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni tecniche

**E**

Indice

## Sistema di bloccaggio

| Code | Descrizione                                                                                         |
|------|-----------------------------------------------------------------------------------------------------|
| S    | Bloccaggio a vite  |

**1**

## Forma dell'inserto

|   |                                                                                     |
|---|-------------------------------------------------------------------------------------|
| C |  |
| D |  |
| R |  |
| S |  |
| T |  |
| V |  |
| W |  |

**2**

## Forma portautensile e angolo di regolazione

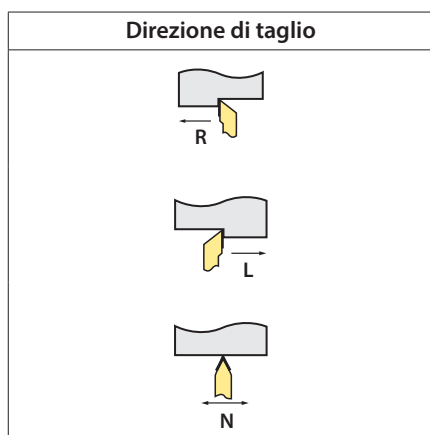
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| <b>A</b>                                                                            | <b>B</b>                                                                            | <b>C</b>                                                                            | <b>D</b>                                                                            | <b>E</b>                                                                            |
|  |  |  |  |  |
| <b>F</b>                                                                            | <b>G</b>                                                                            | <b>H</b>                                                                            | <b>J</b>                                                                            | <b>K</b>                                                                            |
|  |  |  |  |  |
| <b>L</b>                                                                            | <b>M</b>                                                                            | <b>N</b>                                                                            | <b>O</b>                                                                            | <b>P</b>                                                                            |
|  |  |  |  |  |
| <b>Q</b>                                                                            | <b>R</b>                                                                            | <b>S</b>                                                                            | <b>T</b>                                                                            | <b>U</b>                                                                            |
|  |  |  |                                                                                     |                                                                                     |
| <b>V</b>                                                                            | <b>W</b>                                                                            | <b>X</b>                                                                            |                                                                                     |                                                                                     |

**3**

## Angolo di spoglia inferiore

|                                                                                                |                                                                                                |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| <b>B</b>  | <b>C</b>  |
| <b>D</b>  | <b>E</b>  |
| <b>N</b>  | <b>P</b>  |

**4**

**5**

**Altezza stelo h [mm]**

| Code | h  |
|------|----|
| 12   | 12 |
| 16   | 16 |
| 20   | 20 |
| 25   | 25 |
| 32   | 32 |
| 40   | 40 |
| 50   | 50 |

**6**

**Larghezza stelo b [mm]**

| Code | b  |
|------|----|
| 12   | 12 |
| 16   | 16 |
| 20   | 20 |
| 25   | 25 |
| 32   | 32 |
| 40   | 40 |
| 50   | 50 |

**7**

**Lungh. portautensile L [mm]**

| Code | L   |
|------|-----|
| H    | 100 |
| K    | 125 |
| M    | 150 |
| P    | 170 |
| Q    | 180 |
| R    | 200 |
| S    | 250 |
| T    | 300 |

**8**

| Lunghezza tagliente [mm] |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|--------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| I.C<br>[mm]              | Forma dell'inserto                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                          |  |  |  |  |  |  |  |
|                          | C                                                                                 | D                                                                                 | R                                                                                 | S                                                                                   | T                                                                                   | V                                                                                   | W                                                                                   |
| 5,56                     | 09                                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 6,35                     | 06                                                                                | 07                                                                                | 11                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 9,525                    | 09                                                                                | 11                                                                                | 09                                                                                | 09                                                                                  | 16                                                                                  | 16                                                                                  | 06                                                                                  |
| 12,7                     | 12                                                                                | 15                                                                                | 12                                                                                | 12                                                                                  | 22                                                                                  | 22                                                                                  | 08                                                                                  |
| 15,875                   | 16                                                                                | 19                                                                                | 15                                                                                | 15                                                                                  | 27                                                                                  |                                                                                     |                                                                                     |
| 19,05                    | 19                                                                                | 19                                                                                |                                                                                   | 19                                                                                  | 33                                                                                  |                                                                                     |                                                                                     |
| 25,4                     | 25                                                                                | 25                                                                                |                                                                                   | 25                                                                                  | 44                                                                                  |                                                                                     |                                                                                     |
| 32                       | 32                                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

**9**

Portautensile per tornitura di minuteria  
(Swissturning)

**10**

Con raffreddamento interno

**11****A**

Tornitura

**B**

Fresatura

**C**

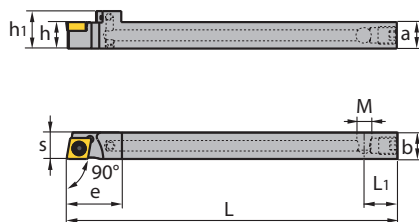
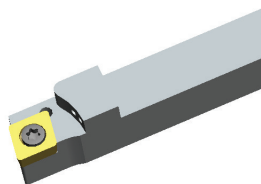
Foratura

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tecniche**E**

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## CC\*\* Portautensile S-Bloccaggio

SCACR/L-SC Kr: 90°



| Articolo          | * | Stock |   | Dimensioni [mm] |    |     |    |                |    |                |    |      | kg   | Inserto    |
|-------------------|---|-------|---|-----------------|----|-----|----|----------------|----|----------------|----|------|------|------------|
|                   |   | R     | L | a               | b  | L   | h  | h <sub>1</sub> | s  | L <sub>1</sub> | e  | M    |      |            |
| SCACR/L1212M09-SC | * | ●     | ● | 12              | 12 | 150 | 12 | 17             | 12 | 15             | 25 | M8X1 | 0,14 | CC**09T3** |
| SCACR/L1616H09-SC | * | ●     | ● | 16              | 16 | 100 | 16 | 21             | 16 | 15             | 28 | M8X1 | 0,21 | CC**09T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

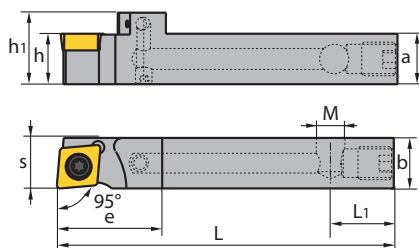
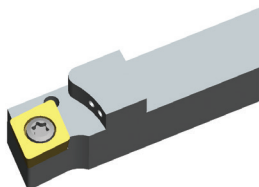
|  | Inserto | CC**09T3**            |
|--|---------|-----------------------|
|  | h       | 12-16                 |
|  | Vite    | I60M3,5x8<br>(2,7 Nm) |
|  | Chiave  | WT15IP                |

### Inserto

|                 |                     |                    |                        |                             |                 |
|-----------------|---------------------|--------------------|------------------------|-----------------------------|-----------------|
|                 |                     |                    |                        |                             |                 |
| <b>Finitura</b> | <b>Media Lavor.</b> | <b>Sgrossatura</b> | <b>Lavorazione Al.</b> | <b>Lavor.- ghisa grigia</b> | <b>PCBN/PCD</b> |
| A117            | A119                | A121               | A122                   | A121                        | A180            |

## CC\*\* Portautensile S-Bloccaggio

SCLCR/L-SC Kr: 95°



| Articolo          | *   | Stock |    | Dimensioni [mm] |    |    |    |                |    |                |      |      | Inserto    |
|-------------------|-----|-------|----|-----------------|----|----|----|----------------|----|----------------|------|------|------------|
|                   |     | R     | L  | a               | b  | L  | h  | h <sub>1</sub> | s  | L <sub>1</sub> | e    | M    |            |
| SCLCR/L1010F06-S  | ●   | ●     | 10 | 10              | 80 | 10 | 15 | 10             | 15 | 10             |      | 0,06 | CC**0602** |
| SCLCR/L1212F09-SC | * ● | ●     | 12 | 12              | 80 | 12 | 17 | 12             | 15 | 25             | M8X1 | 0,07 | CC**09T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|  | Inserto | CC**0602**              | CC**09T3**            |
|--|---------|-------------------------|-----------------------|
|  | h       | 10                      | 12                    |
|  | Vite    | I60M2,5×6,5<br>(1,0 Nm) | I60M3,5×8<br>(2,7 Nm) |
|  | Chiave  | WT07IP                  | WT15IP                |

## Inserto

|          |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A116     | A119         | A121        | A122            | A121                 | A180     |

A

Tornitura

B

Fresatura

C

Foratura

D

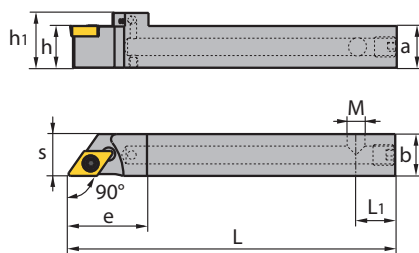
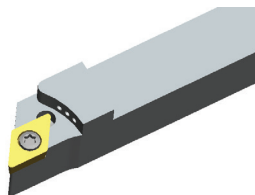
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Indice

## DC\*\* Portautensile S-Bloccaggio

SDACR/L-SC Kr: 90°



| Articolo          | * | Stock |   | Dimensioni [mm] |    |     |    |                |    |                |    |      | kg   | Inserto    |
|-------------------|---|-------|---|-----------------|----|-----|----|----------------|----|----------------|----|------|------|------------|
|                   |   | R     | L | a               | b  | L   | h  | h <sub>1</sub> | s  | L <sub>1</sub> | e  | M    |      |            |
| SDACR/L1212M07-SC | * | ●     | ● | 12              | 12 | 150 | 12 | 17             | 12 | 15             | 25 | M8X1 | 0,15 | DC**0702** |
| SDACR/L1212H11-SC | * | ○     |   | 12              | 12 | 100 | 12 | 17             | 12 | 15             | 30 | M8X1 | 0,1  | DC**11T3** |
| SDACR/L1616K11-SC | * | ●     | ● | 16              | 16 | 125 | 16 | 21             | 16 | 15             | 30 | M8X1 | 0,21 | DC**11T3** |
| SDACR/L1212M11-SC | * | ●     | ● | 12              | 12 | 150 | 12 | 17             | 12 | 15             | 30 | M8X1 | 0,14 | DC**11T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

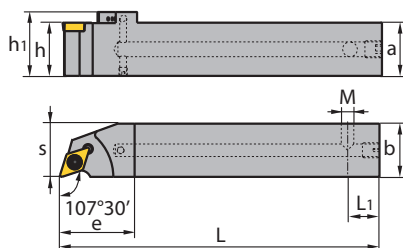
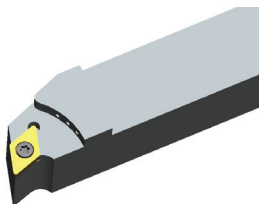
| Parti di ricambio |         |                         |                       |                       |
|-------------------|---------|-------------------------|-----------------------|-----------------------|
|                   | Inserto | DC**0702**              | DC**11T3**            | DC**11T3**            |
|                   | h       | 12                      | 12                    | 12-16                 |
|                   | Vite    | I60M2,5×6,5<br>(1,0 Nm) | I60M3,5×8<br>(2,7 Nm) | I60M3,5×8<br>(2,7 Nm) |
|                   | Chiave  | WT07IP                  | WT15IP                | WT15IP                |

| Inserto  |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A126     | A127         | A129        | A129            | A129                 | A184     |



## DC\*\* Portautensile S-Bloccaggio

SDHCR/L-SC Kr: 107°30'



| Articolo          | * | Stock | Dimensioni [mm] |    |     |    |                |    |                |    |      | kg   | Inserto    |
|-------------------|---|-------|-----------------|----|-----|----|----------------|----|----------------|----|------|------|------------|
|                   |   |       | a               | b  | L   | h  | h <sub>1</sub> | s  | L <sub>1</sub> | e  | M    |      |            |
| SDHCR/L2020K11-SC | * | ○     | 20              | 20 | 125 | 20 | 25             | 20 | 15             | 30 | M8X1 | 0,35 | DC**11T3** |
| SDHCR/L2525M11-SC | * | ●     | 25              | 25 | 150 | 25 | 30             | 25 | 15             | 35 | M8X1 | 0,66 | DC**11T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

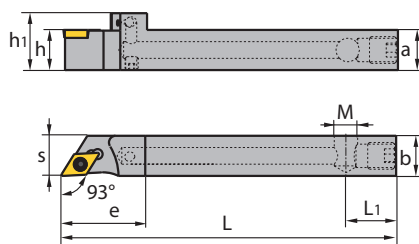
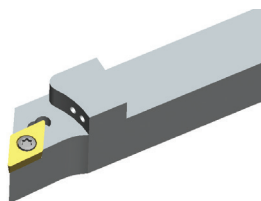
|  | Inserto | DC**11T3**            |
|--|---------|-----------------------|
|  | h       | 20-25                 |
|  | Vite    | I60M3,5x8<br>(2,7 Nm) |
|  | Chiave  | WT15IP                |

## Inserto

|          |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A126     | A127         | A129        | A129            | A129                 | A184     |

## DC\*\* Portautensile S-Bloccaggio

SDJCR/L-SC Kr: 93°



| Articolo          | * | Stock |   | Dimensioni [mm] |    |     |    |                |    |                |    |      | kg   | Inserto    |
|-------------------|---|-------|---|-----------------|----|-----|----|----------------|----|----------------|----|------|------|------------|
|                   |   | R     | L | a               | b  | L   | h  | h <sub>1</sub> | s  | L <sub>1</sub> | e  | M    |      |            |
| SDJCR/L1212H07-SC | * | ●     | ● | 12              | 12 | 100 | 12 | 17             | 12 | 15             | 25 | M8X1 | 0,1  | DC**0702** |
| SDJCR/L1212H11-SC | * | ●     | ● | 12              | 12 | 100 | 12 | 17             | 12 | 15             | 30 | M8X1 | 0,1  | DC**11T3** |
| SDJCR/L1616K11-SC | * | ●     | ● | 16              | 16 | 125 | 16 | 21             | 16 | 15             | 30 | M8X1 | 0,21 | DC**11T3** |

● In magazzino ○ Su richiesta

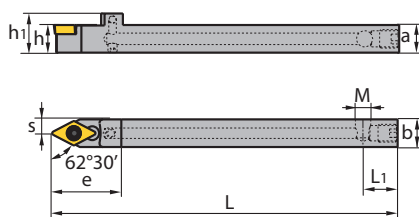
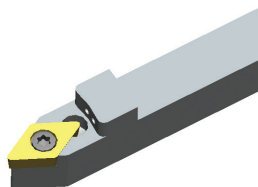
\* Con raffreddamento interno

| Parti di ricambio |         |                         |                       |
|-------------------|---------|-------------------------|-----------------------|
|                   | Inserto | DC**0702**              | DC**11T3**            |
|                   | h       | 12                      | 12-16                 |
|                   | Vite    | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x8<br>(2,7 Nm) |
|                   | Chiave  | WT07IP                  | WT15IP                |

| Inserto  |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A126     | A127         | A129        | A129            | A129                 | A184     |

## DC\*\* Portautensile S-Bloccaggio

SDNCN-SC Kr: 62°30'



| Articolo        | * | Stock | Dimensioni [mm] |    |     |    |                |   |                |    |      | kg   | Inserto    |
|-----------------|---|-------|-----------------|----|-----|----|----------------|---|----------------|----|------|------|------------|
|                 |   |       | a               | b  | L   | h  | h <sub>1</sub> | s | L <sub>1</sub> | e  | M    |      |            |
| SDNCN1212H11-SC | * | ○     | 12              | 12 | 100 | 12 | 17             | 6 | 15             | 30 | M8X1 | 0,09 | DC**11T3** |
| SDNCN1212M11-SC | * | ●     | 12              | 12 | 150 | 12 | 17             | 6 | 15             | 30 | M8X1 | 0,1  | DC**11T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

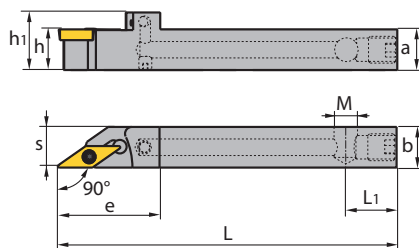
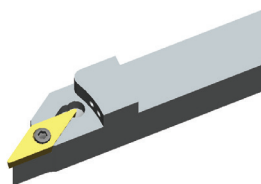
|  | Inserto | DC**11T3**            |
|--|---------|-----------------------|
|  | h       | 12                    |
|  | Vite    | I60M3,5x8<br>(2,7 Nm) |
|  | Chiave  | WT15IP                |

## Inserto

|          |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A126     | A127         | A129        | A129            | A129                 | A184     |

## VC\*\* Portautensile S-Bloccaggio

SVACR/L-SC Kr: 90°



| Articolo          | * | Stock |   | Dimensioni [mm] |    |     |    |                |    |                |    |      | kg  | Inserto    |
|-------------------|---|-------|---|-----------------|----|-----|----|----------------|----|----------------|----|------|-----|------------|
|                   |   | R     | L | a               | b  | L   | h  | h <sub>1</sub> | s  | L <sub>1</sub> | e  | M    |     |            |
| SVACR/L1212H11-SC | * | ●     | ● | 12              | 12 | 100 | 12 | 17             | 12 | 15             | 30 | M8X1 | 0,1 | VC**1103** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

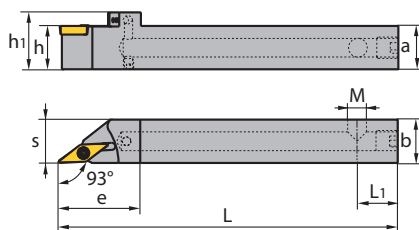
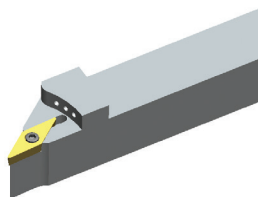
|  | Inserto | VC**1103**              |
|--|---------|-------------------------|
|  | h       | 12                      |
|  | Vite    | I60M2,5x6,5<br>(1,0 Nm) |
|  | Chiave  | WT07IP                  |

### Inserto

| Finitura | Lavorazione Al. | PCBN/PCD |
|----------|-----------------|----------|
| A156     | A154            | A193     |

## VC\*\* Portautensile S-Bloccaggio

SVJCR/L-SC Kr: 93°



| Articolo          |  | Stock |   | Dimensioni [mm] |    |     |    |                |    |                |    |      |  | Inserto                                                                             |
|-------------------|-----------------------------------------------------------------------------------|-------|---|-----------------|----|-----|----|----------------|----|----------------|----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                   |                                                                                   | R     | L | a               | b  | L   | h  | h <sub>1</sub> | s  | L <sub>1</sub> | e  | M    |                                                                                     |  |
| SVJCR/L0808H11-S  |                                                                                   | ●     | ● | 8               | 8  | 100 | 8  | 13             | 8  | 15             | 22 | M8X1 | 0,044                                                                               | VC**1103**                                                                          |
| SVJCR/L1212H11-SC |  | ●     | ● | 12              | 12 | 100 | 12 | 17             | 12 | 15             | 30 | M8X1 | 0,095                                                                               | VC**1103**                                                                          |
| SVJCR/L1616K11-SC |  | ●     | ● | 16              | 16 | 125 | 16 | 21             | 16 | 15             | 30 | M8X1 | 0,2                                                                                 | VC**1103**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|  | Inserto | VC**1103**              |
|--|---------|-------------------------|
|  | h       | 8-16                    |
|  | Vite    | I60M2,5x6,5<br>(1,0 Nm) |
|  | Chiave  | WT07IP                  |

## Inserto

| Finitura | Lavorazione Al. | PCBN/PCD |
|----------|-----------------|----------|
| A156     | A154            | A193     |

A

Tornitura

B

Fresatura

C

Foratura

D

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**RW P L F N L/R 19**

**1 2 3 4 5 6 7**

| Sistema di bloccaggio | Forma dell'inserto                     |  |
|-----------------------|----------------------------------------|--|
| Code                  | Descrizione                            |  |
| P                     | Bloccaggio a leva                      |  |
| M                     | Sistema di bloccaggio a staffa / perno |  |
| S                     | Bloccaggio a vite                      |  |
| C/J                   | Bloccaggio a staffa                    |  |
| D                     | Doppio bloccaggio                      |  |

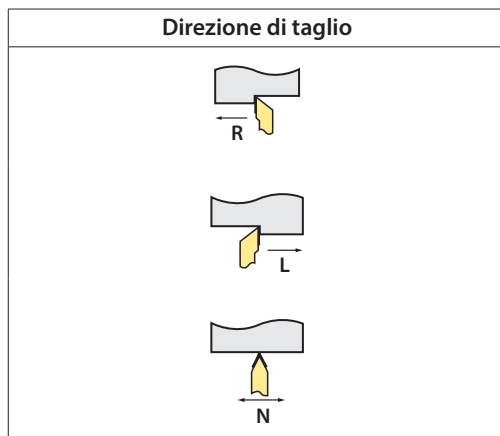
  

| Forma dell'inserto |  |
|--------------------|--|
| C                  |  |
| D                  |  |
| R                  |  |
| S                  |  |
| T                  |  |
| V                  |  |
| L                  |  |

| Forma portautensile e angolo di regolazione |  |
|---------------------------------------------|--|
|                                             |  |
|                                             |  |
|                                             |  |
|                                             |  |
|                                             |  |
|                                             |  |
|                                             |  |
|                                             |  |
|                                             |  |
|                                             |  |
|                                             |  |
|                                             |  |

| Angolo di spoglia inferiore |  |
|-----------------------------|--|
|                             |  |
|                             |  |
|                             |  |

**6**

| I.C<br>[mm] | Lunghezza tagliente [mm] |    |    |    |    |    |    |
|-------------|--------------------------|----|----|----|----|----|----|
|             | Forma dell'inserto       |    |    |    |    |    |    |
|             |                          |    |    |    |    |    |    |
|             | C                        | D  | R  | S  | T  | V  | W  |
| 5,56        | 09                       |    |    |    |    |    |    |
| 6,35        | 06                       | 07 |    |    | 11 |    |    |
| 9,525       | 09                       | 11 | 09 | 09 | 16 | 16 | 06 |
| 12,7        | 12                       | 15 | 12 | 12 | 22 | 22 | 08 |
| 15,875      | 16                       | 19 | 15 | 15 | 27 |    |    |
| 19,05       | 19                       |    | 19 | 19 | 33 |    |    |
| 25,4        | 25                       |    | 25 | 25 | 44 |    |    |
| 32          |                          |    | 32 |    |    |    |    |

**7****A**

Tornitura

**B**

Fresatura

**C**

Foratura

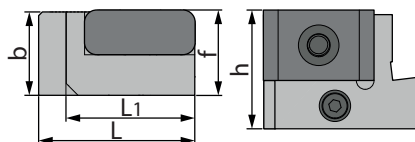
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tecniche**E**

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## LN\*\* Portautensile (esterno)

P-Bloccaggio

RW-PLANR/L Kr: 90°



Versione destra

| Articolo      | * | Stock |   | Dimensioni [mm] |    |    |                |    | Inserto    |
|---------------|---|-------|---|-----------------|----|----|----------------|----|------------|
|               |   | R     | L | b               | L  | h  | L <sub>1</sub> | f  |            |
| RW-PLANR/L-19 | * | ○     | ○ | 22,5            | 43 | 32 | 35             | 23 | LNUX1919** |
| RW-PLANR/L-30 | * | ○     | ○ | 22,5            | 43 | 32 | 35             | 23 | LNUX3019** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|  | Inserto           | LNUX1919**            | LNUX3019**            |
|--|-------------------|-----------------------|-----------------------|
|  | h                 | 25-32                 | 25-32                 |
|  | Leva di fissaggio | L5 RWL                | L5 RWL                |
|  | Vite              | LEM8×25 RWL (10,2 Nm) | LEM8×25 RWL (10,2 Nm) |
|  | Chiave            | WH30L                 | WH30L                 |

### Inserto



Alta asp.

A115

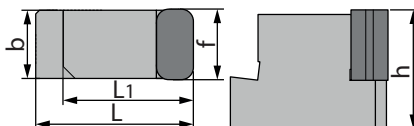


## LN\*\* Portautensile (esterno) P-Bloccaggio

RW-PLFNR/L Kr: 90°



Versione destra



| Articolo      | * | Stock |   | Dimensioni [mm] |    |    |                |      | Inserto                                                                             |
|---------------|---|-------|---|-----------------|----|----|----------------|------|-------------------------------------------------------------------------------------|
|               |   | R     | L | b               | L  | h  | L <sub>1</sub> | f    |  |
| RW-PLFNR/L-19 | * | ○     | ○ | 18,6            | 43 | 32 | 35             | 19,1 | LNUX1919**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|                                                                                     | Inserto           | LNUX1919**               |
|-------------------------------------------------------------------------------------|-------------------|--------------------------|
|                                                                                     | h                 | 25-32                    |
|   | Leva di fissaggio | L5 RWL                   |
|  | Vite              | LEM8×25 RWL<br>(10,2 Nm) |
|  | Chiave            | WH30L                    |

## Inserto



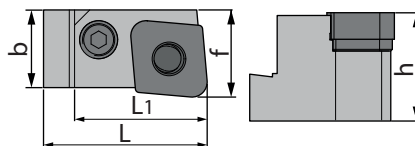
Alta asp.

A115

## CN\*\* Portautensile (esterno)

### P-Bloccaggio

RW-PCLNR/L Kr: 95°



Versione destra

| Articolo        | * | Stock |   | Dimensioni [mm] |    |    |                |      | Inserto    |
|-----------------|---|-------|---|-----------------|----|----|----------------|------|------------|
|                 |   | R     | L | b               | L  | h  | L <sub>1</sub> | f    |            |
| RW-PCLNR/L-1907 | * | ○     | ○ | 24,8            | 43 | 32 | 35             | 19,1 | CNMM1907** |
| RW-PCLNR/L-1911 | * | ○     | ○ | 24,8            | 43 | 32 | 35             | 19,1 | CNMM1911** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

#### Parti di ricambio

|  | Inserto                       | CNMM1907**            | CNMM1911**            |
|--|-------------------------------|-----------------------|-----------------------|
|  | h                             | 25-32                 | 25-32                 |
|  | Leva di fissaggio             | L5 RWC                | L5 RWC                |
|  | Vite                          | LEM8×25 RWC (10,2 Nm) | LEM8×25 RWC (10,2 Nm) |
|  | Perno dist (sot-toplacchetta) | SP5 RWC               | SP5 RWC               |
|  | Sottoplacchetta               | C19 RWC               | C19 RWC               |
|  | Chiave                        | WH30L                 | WH30L                 |

#### Inserto

|          |             |
|----------|-------------|
|          |             |
| Finitura | Sgrossatura |
| A114     | A114        |

## This image shows a full page of a handwriting practice worksheet. It consists of multiple rows of horizontal dashed lines spaced evenly down the page, providing a guide for letter height and placement. The background is plain white, and there are no other markings or text present.

## Tornitura

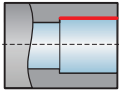
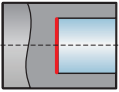
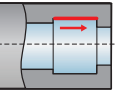
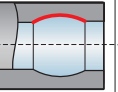
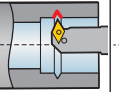
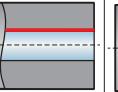
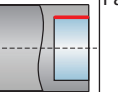
## Fresatura

## Foratura

## Informazioni tecniche

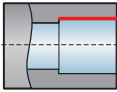
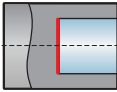
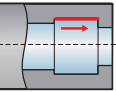
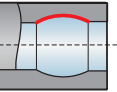
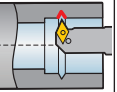
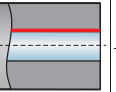
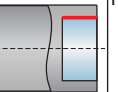
## Indice

## Barre alesatrici

| Portautensile | Applicazione                                                                      |                                                                                     |                                                                                     |                                                                                     |                                                                                       | Pezzo                                                                                 |                                                                                       | Pagina |
|---------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|               | Lavorazione longitudinale                                                         | Lavorazione planare                                                                 | Lavorazione sottosquadra                                                            | Lavorazione di contorni                                                             | Lavorazione di profili                                                                | Stabile                                                                               | Instabile                                                                             |        |
|               |  |    |    |   |    |    |    |        |
| <b>P</b>      | PDSNR/L<br>62°30'                                                                 |    |    |    |    |    |                                                                                       | A326   |
|               | PCLNR/L<br>95°                                                                    |    |    |                                                                                     |                                                                                       |    |    | A324   |
|               | PDUNR/L<br>93°                                                                    |    |                                                                                     |    |    |    |    | A327   |
|               | PSKNR/L<br>75°                                                                    |    |                                                                                     |                                                                                     |                                                                                       |    |                                                                                       | A329   |
|               | PTFNR/L<br>91°                                                                    |    |                                                                                     |                                                                                     |                                                                                       |    |                                                                                       | A330   |
|               | PWLNR/L<br>95°                                                                    |  |  |                                                                                     |                                                                                       |  |                                                                                       | A332   |
| <b>S</b>      | SCFCR/L<br>90°                                                                    |  |                                                                                     |                                                                                     |                                                                                       |  |  | A352   |
|               | SCLCR/L<br>95°                                                                    |  |  |                                                                                     |                                                                                       |  |                                                                                       | A352   |
|               | SCLPR/L<br>95°                                                                    |  |  |                                                                                     |                                                                                       |  |  | A354   |
|               | SDQCR/L<br>107°30'                                                                |  |                                                                                     |  |  |  |  | A357   |
|               | SDQPR/L<br>107°30'                                                                |  |                                                                                     |  |  |  |  | A356   |
|               | SDUCR/L<br>93°                                                                    |  |                                                                                     |  |  |  |  | A359   |
|               | SDUPR/L<br>93°                                                                    |  |                                                                                     |  |                                                                                       |  |  | A358   |
|               | SDZCR/L<br>95°                                                                    |                                                                                     |  |                                                                                     |                                                                                       |  |                                                                                       | A338   |

 Raccomandato

## Barre alesatrici

| Portautensile         |                                                                                                        | Applicazione                                                                        |                                                                                     |                                                                                   |                                                                                     |                                                                                       | Pezzo                                                                                 |                                                                                     | Pagina |
|-----------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|                       |                                                                                                        | Tornitura longitudinale                                                             | Lavorazione planare                                                                 | Lavorazione sottosquadra                                                          | Lavorazione di contorni                                                             | Lavorazione di profili                                                                | Stabile                                                                               | Instabile                                                                           |        |
|                       |                                                                                                        |    |    |  |    |     |    |  |        |
| <b>S</b>              | SSKCR/L<br>75°        |    |                                                                                     |                                                                                   |                                                                                     |                                                                                       |    |                                                                                     | A339   |
|                       | STFCR/L<br>91°        |    |                                                                                     |                                                                                   |                                                                                     |                                                                                       |                                                                                       |                                                                                     | A361   |
|                       | STUPR/L<br>93°        |    |                                                                                     |                                                                                   |                                                                                     |                                                                                       |                                                                                       |                                                                                     | A360   |
|                       | SVQBR/L<br>107°30'    |    |                                                                                     |                                                                                   |    |    |                                                                                       |                                                                                     | A345   |
|                       | SVXBR/L<br>93°        |                                                                                     |                                                                                     |  |                                                                                     |                                                                                       |    |                                                                                     | A347   |
|                       | SVQCR/L<br>107°30'   |  |                                                                                     |                                                                                   |                                                                                     |                                                                                       |                                                                                       |                                                                                     | A363   |
|                       | SVUBR/L<br>93°      |  |                                                                                     |                                                                                   |  |  |                                                                                       |                                                                                     | A346   |
|                       | SVUCR/L<br>93°      |  |                                                                                     |                                                                                   |  |  |                                                                                       |                                                                                     | A364   |
|                       | SZLNR/L<br>95°      |  |  |                                                                                   |                                                                                     |                                                                                       |  |                                                                                     | A365   |
| <b>Antivibrazione</b> | SCLPR/L<br>95°      |  |  |                                                                                   |                                                                                     |                                                                                       |                                                                                       |                                                                                     | A348   |
|                       | SDQPR/L<br>107°30'  |  |                                                                                     |                                                                                   |  |  |                                                                                       |                                                                                     | A349   |
|                       | SDUPR/L<br>93°      |  |                                                                                     |                                                                                   |                                                                                     |                                                                                       |                                                                                       |                                                                                     | A350   |
|                       | STUPR/L<br>93°      |  |                                                                                     |                                                                                   |                                                                                     |                                                                                       |                                                                                       |                                                                                     | A351   |
|                       | SVQCR/L<br>107°30'  |  |                                                                                     |                                                                                   |  |  |                                                                                       |                                                                                     | A343   |
|                       | SVUCR/L<br>93°      |  |                                                                                     |                                                                                   |  |  |                                                                                       |                                                                                     | A344   |

 Raccomandato

**S 16 R – S D U C R 07 – KR93**

1

2

3

4

5

6

7

8

9

10

## Versione del codolo

| Code | Descrizione                                             |
|------|---------------------------------------------------------|
| A    | Stelo di acciaio (foro per refrigerante)                |
| C    | Stelo in metallo duro integrale                         |
| E    | Stelo in metallo duro integrale (foro per refrigerante) |
| S    | Stelo in acciaio                                        |
| X    | Applicazione speciale                                   |

1

## Diametro stelo d [mm]

| Code | d  |
|------|----|
| 16   | 16 |
| 20   | 20 |
| 25   | 25 |
| 32   | 32 |
| 40   | 40 |
| 50   | 50 |

2

## Lunghezza L [mm]

| Code | L   |
|------|-----|
| H    | 100 |
| K    | 125 |
| M    | 150 |
| N    | 160 |
| P    | 170 |
| Q    | 180 |
| R    | 200 |
| S    | 250 |
| T    | 300 |
| U    | 350 |
| V    | 400 |

3

## Sistema di bloccaggio

| Code | Descrizione       |
|------|-------------------|
| P    | Bloccaggio a leva |
| S    | Bloccaggio a vite |

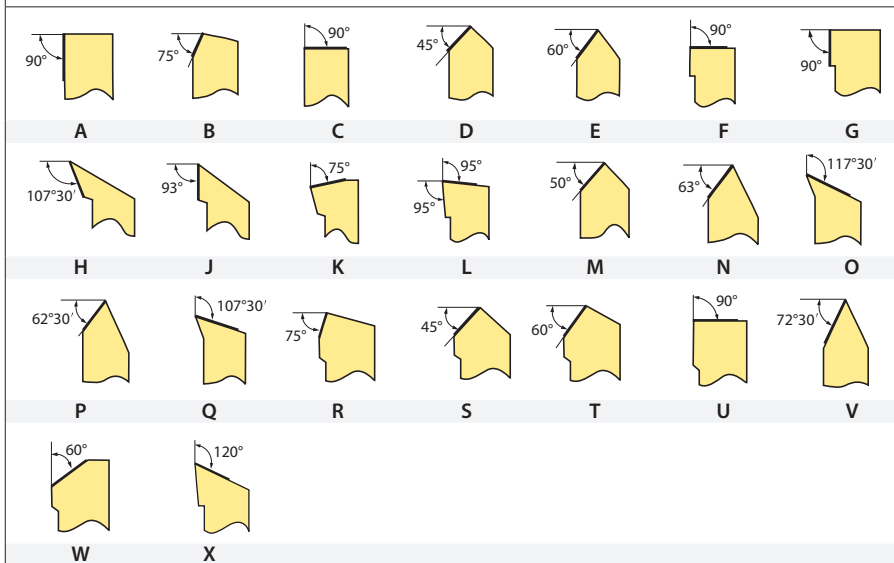
4

## Forma dell'inserto

|   |  |   |  |
|---|--|---|--|
| C |  | D |  |
| R |  | S |  |
| T |  | V |  |
| W |  |   |  |

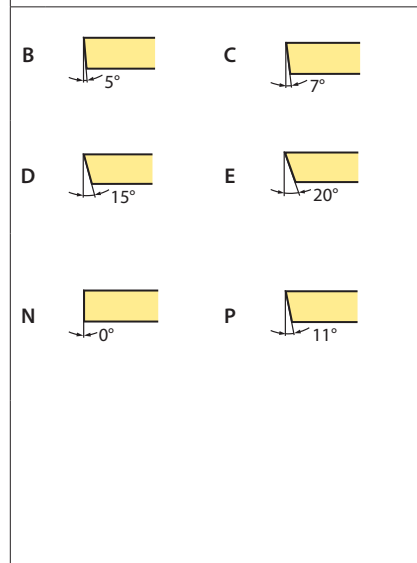
5

Forma portautensile e angolo di regolazione



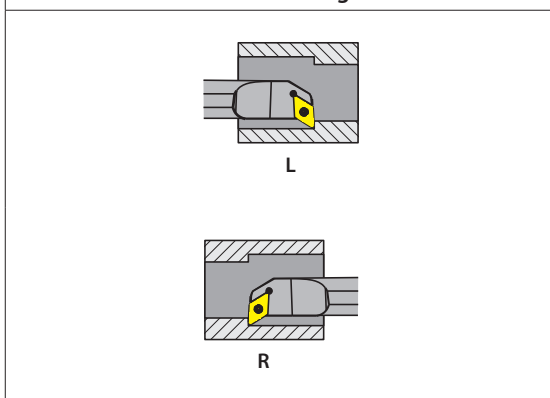
6

Angolo di spoglia inferiore



7

Direzione di taglio



8

Lunghezza tagliente [mm]

| I.C<br>[mm] | Forma dell'inserto |    |    |    |    |    |
|-------------|--------------------|----|----|----|----|----|
|             | C                  | D  | R  | S  | T  | V  |
| 5,56        | 09                 |    |    |    |    |    |
| 6,35        | 06                 | 07 |    |    | 11 |    |
| 9,525       | 09                 | 11 | 09 | 09 | 16 | 16 |
| 12,7        | 12                 | 15 | 12 | 12 | 22 | 22 |
| 15,875      | 16                 | 19 | 15 | 15 | 27 |    |
| 19,05       | 19                 |    | 19 | 19 | 33 |    |
| 25,4        | 25                 |    | 25 | 25 | 44 |    |
| 32          |                    |    | 32 |    |    |    |

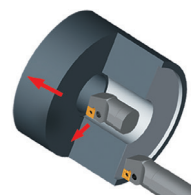
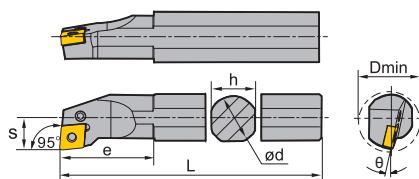
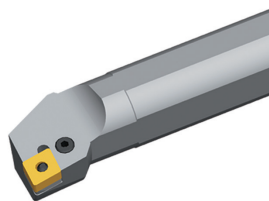
9

Angolo di regolazione

10

## CN\*\* Barre alesatrici in acciaio P-Bloccaggio

PCLNR/L Kr: 95°



Versione destra

| Articolo       | * | Stock |    | Dimensioni [mm] |    |    |    |    |                  |   | Inserto    |
|----------------|---|-------|----|-----------------|----|----|----|----|------------------|---|------------|
|                |   | R     | L  | ød              | L  | h  | S  | e  | D <sub>min</sub> | θ |            |
| S16M-PCLNR/L09 | ● | ●     | 16 | 150             | 15 | 11 | 28 | 20 | -12              |   | CN**0903** |
| S16R-PCLNR/L09 | ● | ●     | 16 | 200             | 15 | 11 | 28 | 20 | -12              |   | CN**0903** |
| S20Q-PCLNR/L09 | ● | ●     | 20 | 180             | 18 | 13 | 31 | 25 | -11              |   | CN**0903** |
| S20S-PCLNR/L09 | ● | ●     | 20 | 250             | 18 | 13 | 31 | 25 | -11              |   | CN**0903** |
| S25Q-PCLNR/L09 | ○ | ○     | 25 | 180             | 23 | 17 | 35 | 32 | -10              |   | CN**0903** |
| S25T-PCLNR/L09 | ● | ○     | 25 | 300             | 23 | 17 | 35 | 32 | -10              |   | CN**0903** |
| A16M-PCLNR/L09 | * | ○     | 16 | 150             | 14 | 11 |    | 20 | -12              |   | CN**0903** |
| S25Q-PCLNR/L12 | ○ | ○     | 25 | 180             | 23 | 17 | 40 | 32 | -12              |   | CN**1204** |
| S25T-PCLNR/L12 | ● | ●     | 25 | 300             | 23 | 17 | 40 | 32 | -12              |   | CN**1204** |
| S32R-PCLNR/L12 | ● | ●     | 32 | 200             | 30 | 22 | 50 | 44 | -10              |   | CN**1204** |
| S32U-PCLNR/L12 | ● | ●     | 32 | 350             | 30 | 22 | 50 | 44 | -10              |   | CN**1204** |
| S40S-PCLNR/L12 | ○ | ●     | 40 | 250             | 37 | 27 | 55 | 54 | -10              |   | CN**1204** |
| S40V-PCLNR/L12 | ● | ●     | 40 | 400             | 37 | 27 | 55 | 54 | -10              |   | CN**1204** |
| S50S-PCLNR/L12 | ○ | ○     | 50 | 250             | 47 | 35 | 56 | 63 | -10              |   | CN**1204** |
| S50W-PCLNR/L12 | ● | ●     | 50 | 450             | 47 | 35 | 56 | 63 | -10              |   | CN**1204** |
| A25R-PCLNR/L12 | * | ●     | 25 | 200             | 24 | 17 | 40 | 32 | -12              |   | CN**1204** |
| A32S-PCLNR/L12 | * | ●     | 32 | 250             | 31 | 22 | 50 | 44 | -10              |   | CN**1204** |
| S50S-PCLNR/L19 | ○ | ○     | 50 | 250             | 47 | 35 | 63 | 63 | -10              |   | CN**1906** |
| S50W-PCLNR/L19 | ● | ○     | 50 | 450             | 47 | 35 | 63 | 63 | -10              |   | CN**1906** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno



**CN\*\* Barre alesatrici in acciaio**

Parti di ricambio

|                                                                                   | <b>Inserto</b><br><b>ød</b>  | <b>CN**0903**</b><br><b>16-25</b> | <b>CN**1204**</b><br><b>25</b> | <b>CN**1204**</b><br><b>32-50</b> | <b>CN**1906**</b><br><b>50</b> |
|-----------------------------------------------------------------------------------|------------------------------|-----------------------------------|--------------------------------|-----------------------------------|--------------------------------|
|  | Leva di fissaggio            | L3C                               | L4A                            | L4A                               | L6                             |
|  | Vite                         | LEM5×9B<br>(4,0 Nm)               |                                |                                   |                                |
|  | Vite                         |                                   |                                |                                   | LEM10×27<br>(16,6 Nm)          |
|  | Vite                         |                                   | LEM6×13,4A<br>(7,0 Nm)         | LEM6×13,4A<br>(7,0 Nm)            |                                |
|  | Perno dist (sottopiacchetta) |                                   |                                | SP4                               | SP6                            |
|  | Sottopiacchetta              |                                   |                                |                                   | C19AP                          |
|  | Sottopiacchetta              |                                   |                                | C12APB                            |                                |
|  | Chiave                       |                                   | WH25L                          | WH25L                             | WH40L                          |
|  | Chiave                       | WT09IP                            |                                |                                   |                                |

Inserto

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| <b>Raschiante</b>                                                                   | <b>Finitura</b>                                                                     | <b>Media Lavor.</b>                                                                 | <b>Sgrossatura</b>                                                                  | <b>Lavor.- ghisa grigia</b>                                                         | <b>PCBN/PCD</b>                                                                       |
| A51                                                                                 | A52                                                                                 | A53                                                                                 | A57                                                                                 | A61                                                                                 | A177                                                                                  |

Codice sistema &gt; A322

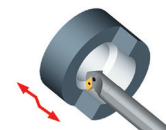
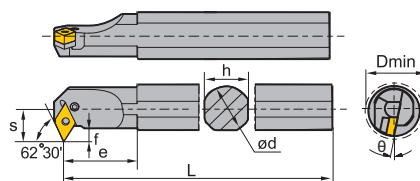
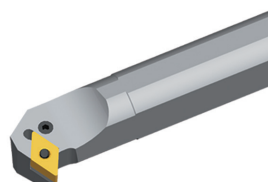
Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

Dati di taglio &gt; A366

## DN\*\* Barre alesatrici in acciaio P-Bloccaggio

PDSNR/L Kr: 62°30'



Versione destra

| Articolo         | * | Stock |   | Dimensioni [mm] |     |    |    |    |     |                  |     | Inserto    |  |
|------------------|---|-------|---|-----------------|-----|----|----|----|-----|------------------|-----|------------|--|
|                  |   | R     | L | ød              | L   | h  | s  | e  | f   | D <sub>min</sub> | θ   |            |  |
| S32R-PDSNR/L15-3 |   | ○     | ○ | 32              | 200 | 30 | 22 | 45 | 8,5 | 40               | -11 | DN**1504** |  |
| S40V-PDSNR/L15-3 |   | ●     |   | 40              | 400 | 37 | 27 | 43 | 9,4 | 50               | -11 | DN**1504** |  |
| A32S-PDSNR/L15-3 | * | ○     | ○ | 32              | 250 | 31 | 22 | 45 | 8,5 | 40               | -11 | DN**1504** |  |
| S32R-PDSNR/L15   |   | ●     | ● | 32              | 200 | 30 | 22 | 45 | 8,5 | 40               | -11 | DN**1506** |  |
| S32U-PDSNR/L15   |   | ●     | ● | 32              | 350 | 30 | 22 | 45 | 8,5 | 40               | -11 | DN**1506** |  |
| S40S-PDSNR/L15   |   | ○     | ○ | 40              | 250 | 37 | 27 | 43 | 9,4 | 50               | -11 | DN**1506** |  |
| S40V-PDSNR/L15   |   | ○     | ○ | 40              | 400 | 37 | 27 | 43 | 9,4 | 50               | -11 | DN**1506** |  |
| A32S-PDSNR/L15   | * | ●     | ● | 32              | 250 | 31 | 22 | 45 | 8,5 | 40               | -11 | DN**1506** |  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|  | Inserto                      | DN**1504**           | DN**1506**           |
|--|------------------------------|----------------------|----------------------|
|  | ød                           | 32-40                | 32-40                |
|  | Leva di fissaggio            | L4                   | L4B                  |
|  | Vite                         | LEM8x21<br>(10,2 Nm) | LEM8x21<br>(10,2 Nm) |
|  | Perno dist (sottopiacchetta) | SP4                  | SP4                  |
|  | Sottopiacchetta              | D15AP                | D15AP                |
|  | Chiave                       | WH30L                | WH30L                |

### Inserto

|            |          |              |             |                     |          |
|------------|----------|--------------|-------------|---------------------|----------|
|            |          |              |             |                     |          |
| Raschiante | Finitura | Media Lavor. | Sgrossatura | Lavor.-ghisa grigia | PCBN/PCD |
| A62        | A63      | A63          | A68         | A69                 | A178     |

Codice sistema > A322

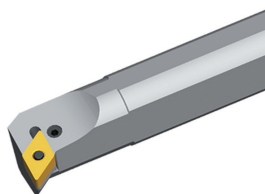
Scelta gradi > A42

Informazioni tecniche > A501

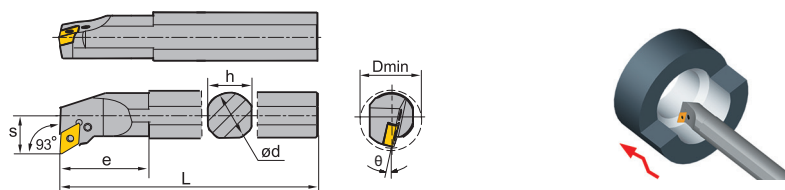
Dati di taglio > A366

**DN\*\* Barre alesatrici in acciaio P-Bloccaggio**

PDUNR/L Kr: 93°



Versione destra



| Articolo         |    | Stock |   | Dimensioni [mm] |     |    |    |    |                  |     | Inserto                                                                             |  |
|------------------|-------------------------------------------------------------------------------------|-------|---|-----------------|-----|----|----|----|------------------|-----|-------------------------------------------------------------------------------------|--|
|                  |                                                                                     | R     | L | ød              | L   | h  | s  | e  | D <sub>min</sub> | θ   |  |  |
| S20Q-PDUNR/L11   |                                                                                     | ●     | ○ | 20              | 180 | 18 | 13 | 30 | 25               | -16 | DN**1104**                                                                          |  |
| S20S-PDUNR/L11   |                                                                                     | ●     | ● | 20              | 250 | 18 | 13 | 30 | 25               | -16 | DN**1104**                                                                          |  |
| S25Q-PDUNR/L11   |                                                                                     | ●     | ● | 25              | 180 | 23 | 17 | 35 | 32               | -13 | DN**1104**                                                                          |  |
| S25T-PDUNR/L11   |                                                                                     | ●     | ● | 25              | 300 | 23 | 17 | 35 | 32               | -13 | DN**1104**                                                                          |  |
| S32R-PDUNR/L11   |                                                                                     | ○     | ○ | 32              | 200 | 30 | 22 | 40 | 40               | -16 | DN**1104**                                                                          |  |
| S32U-PDUNR/L11   |                                                                                     | ●     | ● | 32              | 350 | 30 | 22 | 40 | 40               | -16 | DN**1104**                                                                          |  |
| A25R-PDUNR/L11   |    | ●     |   | 25              | 200 | 24 | 17 | 35 | 32               | -13 | DN**1104**                                                                          |  |
| S32R-PDUNR/L15-3 |                                                                                     | ○     | ○ | 32              | 200 | 30 | 22 | 50 | 40               | -16 | DN**1504**                                                                          |  |
| S32U-PDUNR/L15-3 |                                                                                     | ●     | ● | 32              | 350 | 30 | 22 | 50 | 40               | -16 | DN**1504**                                                                          |  |
| S40S-PDUNR/L15-3 |                                                                                     | ○     | ○ | 40              | 250 | 37 | 27 | 50 | 50               | -11 | DN**1504**                                                                          |  |
| S40V-PDUNR/L15-3 |                                                                                     | ●     | ● | 40              | 400 | 37 | 27 | 50 | 50               | -11 | DN**1504**                                                                          |  |
| A32S-PDUNR/L15-3 |  | ●     | ● | 32              | 250 | 31 | 22 | 50 | 40               | -16 | DN**1504**                                                                          |  |
| S32R-PDUNR/L15   |                                                                                     | ○     | ○ | 32              | 200 | 30 | 22 | 50 | 40               | -16 | DN**1506**                                                                          |  |
| S32U-PDUNR/L15   |                                                                                     | ●     | ● | 32              | 350 | 30 | 22 | 50 | 40               | -16 | DN**1506**                                                                          |  |
| S40S-PDUNR/L15   |                                                                                     | ○     | ○ | 40              | 250 | 37 | 27 | 50 | 50               | -11 | DN**1506**                                                                          |  |
| S40V-PDUNR/L15   |                                                                                     | ●     | ● | 40              | 400 | 37 | 27 | 50 | 50               | -11 | DN**1506**                                                                          |  |
| A32S-PDUNR/L15   |  | ●     | ● | 32              | 250 | 31 | 22 | 50 | 40               | -16 | DN**1506**                                                                          |  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                               |                      |                     |                      |                      |
|-------------------|-------------------------------|----------------------|---------------------|----------------------|----------------------|
|                   | Inserto                       | DN**1104**           | DN**1104**          | DN**1504**           | DN**1506**           |
|                   | ød                            | 20-25                | 32                  | 32-40                | 32-40                |
|                   | Leva di fissaggio             | L3D                  | L3                  | L4                   | L4B                  |
|                   | Vite                          | LEM5x12B<br>(4,0 Nm) | LEM6x17<br>(7,0 Nm) |                      |                      |
|                   | Vite                          |                      |                     | LEM8x21<br>(10,2 Nm) | LEM8x21<br>(10,2 Nm) |
|                   | Perno dist (sot-toplacchetta) |                      | SP3                 | SP4                  | SP4                  |
|                   | Sottoplacchetta               |                      | D11AP               | D15AP                | D15AP                |
|                   | Chiave                        |                      | WH25L               | WH30L                | WH30L                |
|                   | Chiave                        | WT09IP               |                     |                      |                      |

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Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366



A

Tornitura

## DN\*\* Barre alesatrici in acciaio

| Inserto                                                                           |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Raschiante                                                                        | Finitura                                                                          | Media Lavor.                                                                      | Sgrossatura                                                                       | Lavor.- ghisa grigia                                                               | PCBN/PCD                                                                            |
| A62                                                                               | A63                                                                               | A63                                                                               | A68                                                                               | A69                                                                                | A178                                                                                |

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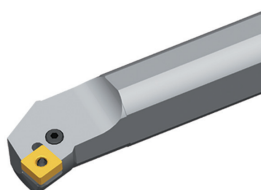
Scelta gradi > A42

Informazioni tecniche > A501

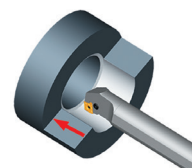
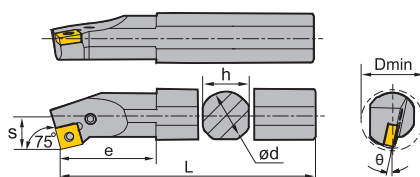
Dati di taglio > A366

**SN\*\* Barre alesatrici in acciaio** **P-Bloccaggio**

PSKNR/L Kr: 75°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |     |    |    |    |                  |     | Inserto    |
|----------------|---|-------|---|-----------------|-----|----|----|----|------------------|-----|------------|
|                |   | R     | L | ød              | L   | h  | s  | e  | D <sub>min</sub> | θ   |            |
| S25Q-PSKNR/L12 |   | ○     | ● | 25              | 180 | 23 | 17 | 42 | 32               | -12 | SN**1204** |
| S25T-PSKNR/L12 |   | ●     | ○ | 25              | 300 | 23 | 17 | 42 | 32               | -12 | SN**1204** |
| S32R-PSKNR/L12 |   | ○     | ○ | 32              | 200 | 30 | 22 | 45 | 44               | -10 | SN**1204** |
| S32U-PSKNR/L12 |   | ●     | ● | 32              | 350 | 30 | 22 | 45 | 44               | -10 | SN**1204** |
| S40S-PSKNR/L12 |   | ○     | ○ | 40              | 250 | 37 | 27 | 50 | 54               | -10 | SN**1204** |
| S40V-PSKNR/L12 |   | ●     | ○ | 40              | 400 | 37 | 27 | 50 | 54               | -10 | SN**1204** |
| A25R-PSKNR/L12 | * | ●     | ● | 25              | 200 | 24 | 17 | 42 | 32               | -12 | SN**1204** |
| A32S-PSKNR/L12 | * | ●     | ● | 32              | 250 | 31 | 22 | 50 | 44               | -12 | SN**1204** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                              |                        |                      |
|-------------------|------------------------------|------------------------|----------------------|
|                   | Inserto                      | SN**1204**             | SN**1204**           |
|                   | ød                           | 25                     | 32-40                |
|                   | Leva di fissaggio            | L4A                    | L4                   |
|                   | Vite                         |                        | LEM8x21<br>(10,2 Nm) |
|                   | Vite                         | LEM6x13,4A<br>(7,0 Nm) |                      |
|                   | Perno dist (sottopiacchetta) |                        | SP4                  |
|                   | Sottopiacchetta              |                        | S12APB               |
|                   | Chiave                       | WH25L                  | WH30L                |

| Inserto  |              |             |                      |          |
|----------|--------------|-------------|----------------------|----------|
|          |              |             |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavor.- ghisa grigia | PCBN/PCD |
| A73      | A73          | A78         | A84                  | A162     |

Codice sistema &gt; A322

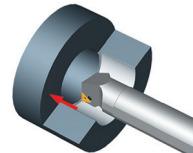
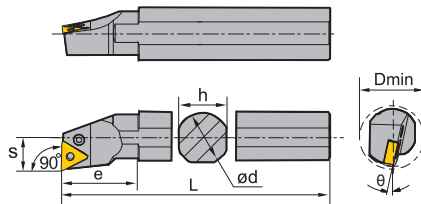
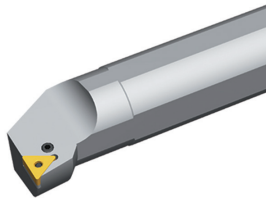
Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

Dati di taglio &gt; A366

## TN\*\* Barre alesatrici in acciaio P-Bloccaggio

PTFNR/L Kr: 90°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |     |    |    |    |                  |     | Inserto    |
|----------------|---|-------|---|-----------------|-----|----|----|----|------------------|-----|------------|
|                |   | R     | L | ød              | L   | h  | s  | e  | D <sub>min</sub> | θ   |            |
| S16M-PTFNR/L11 |   | ○     | ○ | 16              | 150 | 15 | 11 | 28 | 20               | -14 | TN**1103** |
| S16R-PTFNR/L11 |   | ●     | ● | 16              | 200 | 15 | 11 | 28 | 20               | -14 | TN**1103** |
| S20Q-PTFNR/L11 |   | ●     | ● | 20              | 180 | 18 | 13 | 31 | 25               | -12 | TN**1103** |
| S20S-PTFNR/L11 |   | ●     | ● | 20              | 250 | 18 | 13 | 31 | 25               | -12 | TN**1103** |
| S25Q-PTFNR/L11 |   | ○     | ○ | 25              | 180 | 23 | 17 | 35 | 32               | -10 | TN**1103** |
| S25T-PTFNR/L11 |   | ○     | ○ | 25              | 300 | 23 | 17 | 35 | 32               | -10 | TN**1103** |
| S25Q-PTFNR/L16 |   | ○     | ○ | 25              | 180 | 23 | 17 | 42 | 32               | -12 | TN**1604** |
| S25T-PTFNR/L16 |   | ●     | ● | 25              | 300 | 23 | 17 | 42 | 32               | -12 | TN**1604** |
| S32R-PTFNR/L16 |   | ○     | ○ | 32              | 200 | 30 | 22 | 50 | 44               | -10 | TN**1604** |
| S32U-PTFNR/L16 |   | ●     | ● | 32              | 350 | 30 | 22 | 50 | 44               | -10 | TN**1604** |
| S40S-PTFNR/L16 |   | ○     | ○ | 40              | 250 | 37 | 27 | 55 | 54               | -10 | TN**1604** |
| S40V-PTFNR/L16 |   | ●     | ● | 40              | 400 | 37 | 27 | 55 | 54               | -10 | TN**1604** |
| A25R-PTFNR/L16 | * | ●     | ○ | 25              | 200 | 24 | 17 | 40 | 32               | -12 | TN**1604** |
| A32S-PTFNR/L16 | * | ●     | ● | 32              | 250 | 31 | 22 | 50 | 44               | -10 | TN**1604** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                              |                     |                      |                     |
|-------------------|------------------------------|---------------------|----------------------|---------------------|
|                   | Inserto                      | TN**1103**          | TN**1604**           | TN**1604**          |
|                   | ød                           | 16-25               | 25                   | 32-40               |
|                   | Leva di fissaggio            | L2                  | L3B                  | L3                  |
|                   | Vite                         | LEM5×9B<br>(4,0 Nm) | LEM5×12B<br>(4,0 Nm) | LEM6×17<br>(7,0 Nm) |
|                   | Perno dist (sottopiacchetta) |                     |                      | SP3                 |
|                   | Sottopiacchetta              |                     |                      | T16APB              |
|                   | Chiave                       |                     | WH20L                | WH25L               |
|                   | Chiave                       | WT09IP              |                      |                     |

## TN\*\* Barre alesatrici in acciaio

| Inserto                                                                           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Raschiante                                                                        | Finitura                                                                          | Media Lavor.                                                                      | Sgrossatura                                                                       | Lavor.- ghisa grigia                                                              | PCBN/PCD                                                                            |
| A87                                                                               | A88                                                                               | A90                                                                               | A92                                                                               | A99                                                                               | A163                                                                                |

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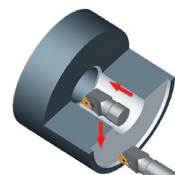
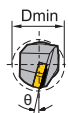
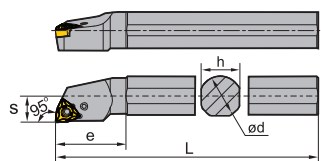
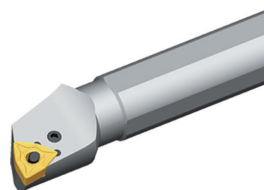
Informazioni tecniche > A501

Dati di taglio > A366

## WN\*\* Barre alesatrici in acciaio

### P-Bloccaggio

PWLNR/L Kr: 95°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |     |    |    |    |                  |     | Inserto    |
|----------------|---|-------|---|-----------------|-----|----|----|----|------------------|-----|------------|
|                |   | R     | L | ød              | L   | h  | s  | e  | D <sub>min</sub> | θ   |            |
|                |   | ●     |   | 16              | 150 | 15 | 11 | 25 | 20               | -13 | WN**0604** |
| S16M-PWLNR/L06 |   | ●     |   | 16              | 150 | 15 | 11 | 25 | 20               | -13 | WN**0604** |
| S16R-PWLNR/L06 |   | ○     | ○ | 16              | 200 | 15 | 11 | 25 | 20               | -13 | WN**0604** |
| S20Q-PWLNR/L06 |   | ●     | ● | 20              | 180 | 18 | 13 | 35 | 25               | -13 | WN**0604** |
| S20S-PWLNR/L06 |   | ●     | ○ | 20              | 250 | 18 | 13 | 35 | 25               | -13 | WN**0604** |
| S25Q-PWLNR/L06 |   | ○     | ○ | 25              | 180 | 23 | 17 | 35 | 32               | -13 | WN**0604** |
| S25T-PWLNR/L06 |   | ○     |   | 25              | 300 | 23 | 17 | 35 | 32               | -13 | WN**0604** |
| S20Q-PWLNR/L08 |   | ●     | ● | 20              | 180 | 18 | 13 | 32 | 25               | -13 | WN**0804** |
| S20S-PWLNR/L08 |   | ●     |   | 20              | 250 | 18 | 13 | 32 | 25               | -13 | WN**0804** |
| S25Q-PWLNR/L08 |   | ●     | ○ | 25              | 180 | 23 | 17 | 45 | 32               | -13 | WN**0804** |
| S25T-PWLNR/L08 |   | ●     | ● | 25              | 300 | 23 | 17 | 45 | 32               | -13 | WN**0804** |
| S32R-PWLNR/L08 |   | ●     | ● | 32              | 200 | 30 | 22 | 50 | 40               | -15 | WN**0804** |
| S32U-PWLNR/L08 |   | ●     | ● | 32              | 350 | 30 | 22 | 50 | 40               | -15 | WN**0804** |
| S50W-PWLNR/L08 |   | ○     | ○ | 50              | 450 | 47 | 35 | 50 | 63               | -15 | WN**0804** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

#### Parti di ricambio

|  | Inserto                     | WN**0604**           | WN**0804**             | WN**0804**           | WN**0804**           |
|--|-----------------------------|----------------------|------------------------|----------------------|----------------------|
|  | ød                          | 16-25                | 20-25                  | 32                   | 50                   |
|  | Leva di fissaggio           | L3B                  | L4A                    | L4                   | L4                   |
|  | Vite                        | LEM5×12B<br>(4,0 Nm) |                        |                      |                      |
|  | Vite                        |                      |                        | LEM8×21<br>(10,2 Nm) | LEM8×21<br>(10,2 Nm) |
|  | Vite                        |                      | LEM6×13,4A<br>(7,0 Nm) |                      |                      |
|  | Perno dist (sotoplacchetta) |                      |                        | SP4                  | SP4                  |
|  | Sotoplacchetta              |                      |                        | W08AP                | W08AP                |
|  | Chiave                      |                      | WH25L                  | WH30L                | WH30L                |
|  | Chiave                      | WT09IP               |                        |                      |                      |

Codice sistema > A322

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366



## WN\*\* Barre alesatrici in acciaio

| Inserto                                                                           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| <b>Raschiante</b>                                                                 | <b>Finitura</b>                                                                   | <b>Media Lavor.</b>                                                               | <b>Sgrossatura</b>                                                                | <b>Lavor.- ghisa grigia</b>                                                       | <b>PCBN/PCD</b>                                                                     |
| A106                                                                              | A107                                                                              | A107                                                                              | A109                                                                              | A111                                                                              | A165                                                                                |

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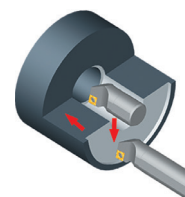
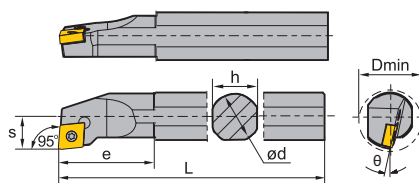
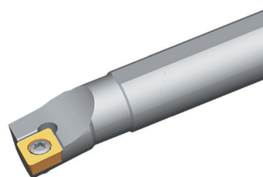
Dati di taglio > A366



## CC\*\* Barre alesatrici in acciaio

### S-Bloccaggio

SCLCR/L Kr: 95°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |     |      |    |                |      |                  |     | Inserto    |  |
|----------------|---|-------|---|-----------------|-----|------|----|----------------|------|------------------|-----|------------|--|
|                |   | R     | L | ød              | L   | h    | s  | L <sub>2</sub> | e    | D <sub>min</sub> | θ   |            |  |
| S08K-SCLCR/L06 |   | ●     | ● | 8               | 125 | 7    | 5  | 14             | 14   | 10               | -15 | CC**0602** |  |
| S10K-SCLCR/L06 |   | ●     | ● | 10              | 125 | 7    | 5  | 14             | 14   | 10               | -15 | CC**0602** |  |
| S10M-SCLCR/L06 |   | ●     | ● | 10              | 150 | 9    | 6  | 14             | 14   | 12               | -13 | CC**0602** |  |
| S12M-SCLCR/L06 |   | ●     | ● | 12              | 150 | 11   | 9  | 25             | 25   | 16               | -10 | CC**0602** |  |
| A08F-SCLCR/L06 | * | ●     | ● | 8               | 80  | 7,5  | 5  | 14             | 14   | 10               | -15 | CC**0602** |  |
| A10H-SCLCR/L06 | * | ●     | ● | 10              | 100 | 9,5  | 6  | 14             | 14   | 12               | -13 | CC**0602** |  |
| A12K-SCLCR/L06 | * | ●     | ● | 12              | 125 | 11,5 | 9  | 25             | 25   | 16               | -10 | CC**0602** |  |
| S12M-SCLCR/L09 |   | ●     | ● | 12              | 150 | 11   | 9  | 25             | 25   | 16               | -10 | CC**09T3** |  |
| S16M-SCLCR/L09 |   | ●     | ○ | 16              | 150 | 15   | 11 | 32,5           | 32,5 | 20               | -12 | CC**09T3** |  |
| S16R-SCLCR/L09 |   | ●     | ● | 16              | 200 | 15   | 11 | 32,5           | 32,5 | 20               | -12 | CC**09T3** |  |
| S20Q-SCLCR/L09 |   | ●     | ● | 20              | 180 | 18   | 13 | 38             | 38   | 25               | -8  | CC**09T3** |  |
| S20S-SCLCR/L09 |   | ●     | ● | 20              | 250 | 18   | 13 | 38             | 38   | 25               | -8  | CC**09T3** |  |
| S25Q-SCLCR/L09 |   | ●     | ○ | 25              | 180 | 23   | 17 | 45             | 45   | 32               | -6  | CC**09T3** |  |
| S25T-SCLCR/L09 |   | ●     | ● | 25              | 300 | 23   | 17 | 45             | 45   | 32               | -6  | CC**09T3** |  |
| A12K-SCLCR/L09 | * | ●     | ● | 12              | 125 | 11,5 | 9  | 25             | 25   | 16               | -10 | CC**09T3** |  |
| A16M-SCLCR/L09 | * | ●     | ● | 16              | 150 | 15,5 | 11 | 32,5           | 32,5 | 20               | -12 | CC**09T3** |  |
| A20Q-SCLCR/L09 | * | ●     | ● | 20              | 180 | 19   | 13 | 38             | 38   | 25               | -8  | CC**09T3** |  |
| A25R-SCLCR/L09 | * | ●     | ● | 25              | 200 | 24   | 17 | 45             | 45   | 32               | -6  | CC**09T3** |  |
| S25Q-SCLCR/L12 |   | ●     | ○ | 25              | 180 | 23   | 17 | 45             | 45   | 32               | -6  | CC**1204** |  |
| S25T-SCLCR/L12 |   | ●     | ● | 25              | 300 | 23   | 17 | 45             | 45   | 32               | -6  | CC**1204** |  |
| S32R-SCLCR/L12 |   | ●     | ● | 32              | 200 | 30   | 22 | 50             | 50   | 40               | -10 | CC**1204** |  |
| S32U-SCLCR/L12 |   | ●     | ● | 32              | 350 | 30   | 22 | 50             | 50   | 40               | -10 | CC**1204** |  |
| S40S-SCLCR/L12 |   | ○     |   | 40              | 250 | 37   | 27 | 60             | 60   | 50               | -8  | CC**1204** |  |
| S40V-SCLCR/L12 |   | ●     | ● | 40              | 400 | 37   | 27 | 60             | 60   | 50               | -8  | CC**1204** |  |
| A25R-SCLCR/L12 | * | ●     | ● | 25              | 200 | 24   | 17 | 45             | 45   | 32               | -6  | CC**1204** |  |
| A32T-SCLCR/L12 | * | ○     |   | 32              | 300 | 30   | 22 |                |      | 40               | -10 | CC**1204** |  |
| A32S-SCLCR/L12 | * | ●     | ● | 32              | 250 | 31   | 22 | 50             | 50   | 40               | -10 | CC**1204** |  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## CC\*\* Barre alesatrici in acciaio

Parti di ricambio

|                                                                                   | Inserto<br>ød            | CC**0602**<br>8-12      | CC**09T3**<br>12-20   | CC**09T3**<br>25       | CC**1204**<br>25      | CC**1204**<br>32-40   |
|-----------------------------------------------------------------------------------|--------------------------|-------------------------|-----------------------|------------------------|-----------------------|-----------------------|
|  | Vite                     | I60M2,5×5,5<br>(1,0 Nm) | I60M3,5×8<br>(2,7 Nm) | I60M3,5×10<br>(2,7 Nm) |                       |                       |
|  | Vite                     |                         |                       |                        | I60M4×11X<br>(3,4 Nm) | I60M4×11X<br>(3,4 Nm) |
|  | Vite (sottoplacchetta)   |                         |                       |                        |                       | SM6×10XA              |
|  | Sottoplacchetta          |                         |                       |                        |                       | C12B5                 |
|  | Chiave (vite)            | WT07IP                  | WT15IP                | WT15IP                 | WT15IP                | WT15IP                |
|  | Chiave (sottoplacchetta) |                         |                       |                        |                       | WH40L                 |

Inserto

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Finitura<br>A116                                                                  | Media Lavor.<br>A119                                                              | Sgrossatura<br>A121                                                               | Lavorazione Al.<br>A122                                                           | Lavor.- ghisa grigia<br>A121                                                      | PCBN/PCD<br>A180                                                                    |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni  
tecniche

E

Indice

Codice sistema > A322

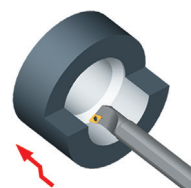
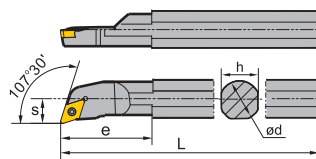
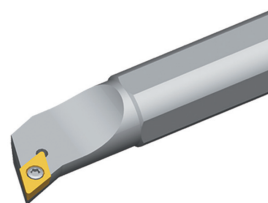
Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366

## DC\*\* Barre alesatrici in acciaio S-Bloccaggio

SDQCR/L Kr: 107°30'



Versione destra

| Articolo       | * | Stock |    | Dimensioni [mm] |     |      |    |                |    |                  |    | Inserto    |
|----------------|---|-------|----|-----------------|-----|------|----|----------------|----|------------------|----|------------|
|                |   | R     | L  | ød              | L   | h    | s  | L <sub>2</sub> | e  | D <sub>min</sub> | θ  |            |
| S10M-SDQCR/L07 | ● | ●     | 10 | 150             | 9   | 7    | 20 | 20             | 13 | -8               |    | DC**0702** |
| S12M-SDQCR/L07 | ● | ●     | 12 | 150             | 11  | 9    | 22 | 22             | 16 | -8               |    | DC**0702** |
| S16M-SDQCR/L07 | ○ | ●     | 16 | 150             | 15  | 11   | 27 | 27             | 20 | -6               |    | DC**0702** |
| S16Q-SDQCR/L07 | ● | ●     | 16 | 180             | 15  | 11   | 27 | 27             | 20 | -6               |    | DC**0702** |
| S16R-SDQCR/L07 | ● | ●     | 16 | 200             | 15  | 11   | 27 | 27             | 20 | -6               |    | DC**0702** |
| A10H-SDQCR/L07 | * | ●     | ●  | 10              | 100 | 9,5  | 7  | 20             | 20 | 13               | -8 | DC**0702** |
| A12K-SDQCR/L07 | * | ●     | ●  | 12              | 125 | 11,5 | 9  | 22             | 22 | 16               | -8 | DC**0702** |
| S20Q-SDQCR/L11 | ● | ○     | 20 | 180             | 18  | 13   | 32 | 32             | 25 | -6               |    | DC**11T3** |
| S20S-SDQCR/L11 | ● | ●     | 20 | 250             | 18  | 13   | 32 | 32             | 25 | -6               |    | DC**11T3** |
| S25Q-SDQCR/L11 | ● | ○     | 25 | 180             | 23  | 17   | 32 | 32             | 32 | -6               |    | DC**11T3** |
| S25T-SDQCR/L11 | ● | ●     | 25 | 300             | 23  | 17   | 32 | 32             | 32 | -6               |    | DC**11T3** |
| A16M-SDQCR/L11 | * | ●     | ●  | 16              | 150 | 15,5 | 11 | 27             | 27 | 20               | -6 | DC**11T3** |
| A20Q-SDQCR/L11 | * | ●     | ●  | 20              | 180 | 19   | 13 | 32             | 32 | 25               | -6 | DC**11T3** |
| A25R-SDQCR/L11 | * | ●     | ●  | 25              | 200 | 24   | 17 | 32             | 32 | 32               | -6 | DC**11T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

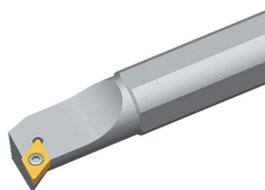
|  | Inserto       | DC**0702**              | DC**0702**              | DC**11T3**            | DC**11T3**            | DC**11T3**             |
|--|---------------|-------------------------|-------------------------|-----------------------|-----------------------|------------------------|
|  | ød            | 10                      | 12-16                   | 16-20                 | 20                    | 25                     |
|  | Vite          | I60M2,5x5,5<br>(1,0 Nm) | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x8<br>(2,7 Nm) | I60M3,5x8<br>(2,7 Nm) | I60M3,5x10<br>(2,7 Nm) |
|  | Chiave (vite) | WT07IP                  | WT07IP                  | WT15IP                | WT15IP                | WT15IP                 |

### Inserto

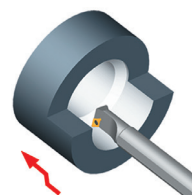
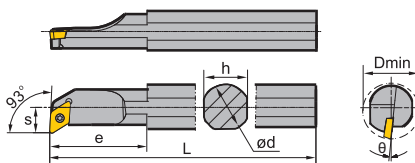
|          |              |             |                 |                     |          |
|----------|--------------|-------------|-----------------|---------------------|----------|
|          |              |             |                 |                     |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor- ghisa grigia | PCBN/PCD |
| A126     | A127         | A129        | A129            | A129                | A184     |

DC\*\* Barre alesatrici in acciaio S-Bloccaggio

SDUCR/L Kr: 93°



Versione destra



| Articolo       | * | Stock |    | Dimensioni [mm] |     |      |    |                |    |                  |    | Inserto    |
|----------------|---|-------|----|-----------------|-----|------|----|----------------|----|------------------|----|------------|
|                |   | R     | L  | ød              | L   | h    | s  | L <sub>2</sub> | e  | D <sub>min</sub> | θ  |            |
| S10M-SDUCR/L07 | • | •     | 10 | 150             | 9   | 7    | -  | 0              | 13 | -8               | -8 | DC**0702** |
| S12M-SDUCR/L07 | • | •     | 12 | 150             | 11  | 9    | 22 | 22             | 16 | -8               | -8 | DC**0702** |
| S16M-SDUCR/L07 | • | •     | 16 | 150             | 15  | 11   | 27 | 27             | 20 | -6               | -6 | DC**0702** |
| S16R-SDUCR/L07 | • | •     | 16 | 200             | 15  | 11   | 27 | 27             | 20 | -6               | -6 | DC**0702** |
| A10H-SDUCR/L07 | * | •     | •  | 10              | 100 | 9,5  | 7  | -              | 0  | 13               | -8 | DC**0702** |
| A12K-SDUCR/L07 | * | •     | •  | 12              | 125 | 11,5 | 9  | 22             | 22 | 16               | -8 | DC**0702** |
| A16M-SDUCR/L07 | * | •     | •  | 16              | 150 | 15,5 | 11 | 27             | 27 | 20               | -6 | DC**0702** |
| S20Q-SDUCR/L11 | • | •     | 20 | 180             | 18  | 13   | 40 | 40             | 25 | -6               | -6 | DC**11T3** |
| S20S-SDUCR/L11 | • | •     | 20 | 250             | 18  | 13   | 40 | 40             | 25 | -6               | -6 | DC**11T3** |
| S25Q-SDUCR/L11 | • | ○     | 25 | 180             | 23  | 17   | 46 | 46             | 32 | -6               | -6 | DC**11T3** |
| S25T-SDUCR/L11 | • | •     | 25 | 300             | 23  | 17   | 46 | 46             | 32 | -6               | -6 | DC**11T3** |
| A16R-SDUCR/L11 | * | ○     | 16 | 200             | 15  | 14,5 | 27 | 27             | 23 | -6               | -6 | DC**11T3** |
| A20Q-SDUCR/L11 | * | •     | •  | 20              | 180 | 19   | 13 | 40             | 40 | 25               | -6 | DC**11T3** |
| A25R-SDUCR/L11 | * | •     | •  | 25              | 200 | 24   | 17 | 46             | 46 | 32               | -6 | DC**11T3** |

• In magazzino ○ Su richiesta

\* Con raffreddamento interno

Parti di ricambio

|  | Inserto | DC**0702**              | DC**11T3**            |
|--|---------|-------------------------|-----------------------|
|  | ød      | 10-16                   | 16-25                 |
|  | Vite    | I60M2,5x5,5<br>(1,0 Nm) | I60M3,5x8<br>(2,7 Nm) |
|  | Chiave  | WT07IP                  | WT15IP                |

Inserto

|          |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A126     | A127         | A129        | A129            | A129                 | A184     |

Codice sistema > A322

Scelta gradi > A42

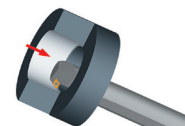
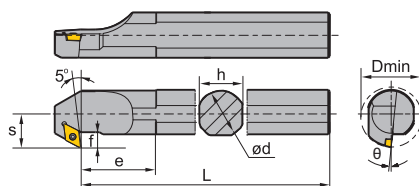
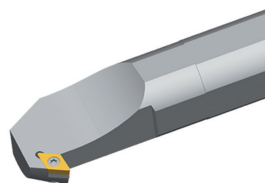
Informazioni tecniche > A501

Dati di taglio > A366



## DC\*\* Barre alesatrici in acciaio S-Bloccaggio

SDZCR/L Kr: 85°



Versione destra

| Articolo       | * | Stock |    | Dimensioni [mm] |    |    |    |     |    |                  |   | Inserto    |  |
|----------------|---|-------|----|-----------------|----|----|----|-----|----|------------------|---|------------|--|
|                |   | R     | L  | ød              | L  | h  | s  | e   | f  | D <sub>min</sub> | θ |            |  |
| S25Q-SDZCR/L11 | ● | ●     | 25 | 180             | 23 | 17 | 30 | 6,9 | 32 | -6               |   | DC**11T3** |  |
| S25T-SDZCR/L11 | ● | ●     | 25 | 300             | 23 | 17 | 30 | 6,9 | 32 | -6               |   | DC**11T3** |  |
| S32R-SDZCR/L11 | ○ |       | 32 | 200             | 30 | 22 | 39 | 8,4 | 40 | -6               |   | DC**11T3** |  |
| S32U-SDZCR/L11 | ● | ●     | 32 | 350             | 30 | 22 | 39 | 8,4 | 40 | -6               |   | DC**11T3** |  |
| S40S-SDZCR/L11 | ○ | ●     | 40 | 250             | 37 | 27 | 47 | 9,4 | 50 | -4               |   | DC**11T3** |  |
| S40V-SDZCR/L11 | ● | ●     | 40 | 400             | 37 | 27 | 47 | 9,4 | 50 | -4               |   | DC**11T3** |  |
| A25R-SDZCR/L11 | * | ●     | 25 | 200             | 24 | 17 | 30 | 4,5 | 32 | -6               |   | DC**11T3** |  |
| A32S-SDZCR/L11 | * | ●     | 32 | 250             | 31 | 22 | 39 | 6   | 40 | -6               |   | DC**11T3** |  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

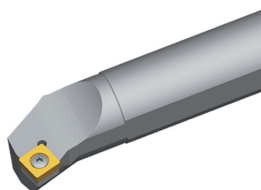
|  | Inserto                  | DC**11T3**             | DC**11T3**             |
|--|--------------------------|------------------------|------------------------|
|  | ød                       | 25                     | 32-40                  |
|  | Vite                     | I60M3,5x10<br>(2,7 Nm) | I60M3,5x12<br>(2,7 Nm) |
|  | Vite (sottoplacchetta)   |                        | SM5x8.65XA             |
|  | Sottoplacchetta          |                        | D11BS                  |
|  | Chiave (vite)            | WT15IP                 | WT15IP                 |
|  | Chiave (sottoplacchetta) |                        | WH35L                  |

### Inserto

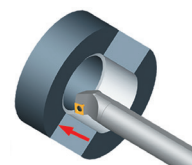
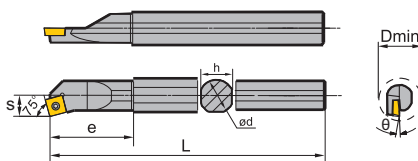
|          |              |             |                 |                     |          |
|----------|--------------|-------------|-----------------|---------------------|----------|
|          |              |             |                 |                     |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor. ghisa grigia | PCBN/PCD |
| A126     | A127         | A129        | A129            | A129                | A184     |

**SC\*\* Barre alesatrici in acciaio** S-Bloccaggio

SSKCR/L Kr: 75°



Versione destra



| Articolo       | * | Stock |    | Dimensioni [mm] |     |    |      |      |                  |   | Inserto    |
|----------------|---|-------|----|-----------------|-----|----|------|------|------------------|---|------------|
|                |   | R     | L  | ød              | L   | h  | s    | e    | D <sub>min</sub> | θ |            |
| S12M-SSKCR/L09 | ● | ●     | 12 | 150             | 11  | 9  | 26   | 16   | -10              |   | SC**09T3** |
| S16M-SSKCR/L09 | ○ | ○     | 16 | 150             | 15  | 11 | 32,5 | 20   | -11              |   | SC**09T3** |
| S16R-SSKCR/L09 | ○ | ○     | 16 | 200             | 15  | 11 | 32,5 | 20   | -11              |   | SC**09T3** |
| S20Q-SSKCR/L09 | ○ | ○     | 20 | 180             | 18  | 13 | 34,5 | 25   | -6               |   | SC**09T3** |
| S20S-SSKCR/L09 | ● | ○     | 20 | 250             | 18  | 13 | 34,5 | 25   | -6               |   | SC**09T3** |
| A12K-SSKCR/L09 | * | ●     | ○  | 12              | 125 | 11 | 9    | 26   | -10              |   | SC**09T3** |
| A16M-SSKCR/L09 | * | ●     | ○  | 16              | 150 | 15 | 11   | 32,5 | -11              |   | SC**09T3** |
| A20Q-SSKCR/L09 | * | ●     | ○  | 20              | 180 | 19 | 13   | 34,5 | -6               |   | SC**09T3** |
| S25Q-SSKCR/L12 | ○ | ○     | 25 | 180             | 23  | 17 | 36,3 | 32   | -8               |   | SC**1204** |
| S25T-SSKCR/L12 | ● | ○     | 25 | 300             | 23  | 17 | 36,3 | 32   | -8               |   | SC**1204** |
| S32R-SSKCR/L12 | ○ | ○     | 32 | 200             | 30  | 22 | 43,5 | 40   | -10              |   | SC**1204** |
| S32U-SSKCR/L12 | ● |       | 32 | 350             | 30  | 22 | 43,5 | 40   | -10              |   | SC**1204** |
| A25R-SSKCR/L12 | * | ●     | ○  | 25              | 200 | 24 | 17   | 41,3 | -8               |   | SC**1204** |
| A32S-SSKCR/L12 | * | ●     |    | 32              | 250 | 31 | 22   | 42,8 | -10              |   | SC**1204** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

Parti di ricambio

|  | Inserto                  | SC**09T3**            | SC**1204**            | SC**1204**            |
|--|--------------------------|-----------------------|-----------------------|-----------------------|
|  | ød                       | 12-20                 | 25                    | 32                    |
|  | Vite                     | I60M3,5x8<br>(2,7 Nm) |                       |                       |
|  | Vite                     |                       | I60M4x11X<br>(3,4 Nm) | I60M4x11X<br>(3,4 Nm) |
|  | Vite (sottoplacchetta)   |                       |                       | SM6x10XA              |
|  | Sottoplacchetta          |                       |                       | S12BS                 |
|  | Chiave (vite)            | WT15IP                | WT15IP                | WT15IP                |
|  | Chiave (sottoplacchetta) |                       |                       | WH40L                 |

A

Tornitura

## SC\*\* Barre alesatrici in acciaio

| Inserto                                                                           |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |  |
| <b>Finitura</b>                                                                   | <b>Media Lavor.</b>                                                               | <b>Sgrossatura</b>                                                                | <b>Lavorazione Al.</b>                                                            |
| A134                                                                              | A135                                                                              | A136                                                                              | A136                                                                              |

B

Fresatura

C

Foratura

D

Informazioni  
tecniche

E

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Codice sistema > A322

Scelta gradi > A42

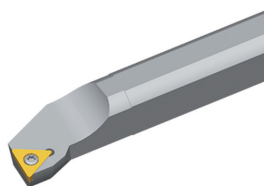
Informazioni tecniche > A501

Dati di taglio > A366

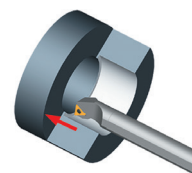
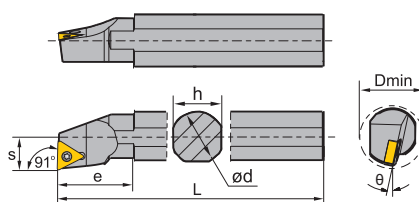


**TC\*\* Barre alesatrici in acciaio S-Bloccaggio**

STFCR/L Kr: 91°



Versione destra



| Articolo       | * | Stock |    | Dimensioni [mm] |     |      |    |    |                  |     | Inserto    |
|----------------|---|-------|----|-----------------|-----|------|----|----|------------------|-----|------------|
|                |   | R     | L  | ød              | L   | h    | s  | e  | D <sub>min</sub> | θ   |            |
| S12M-STFCR/L11 | ● | ●     | 12 | 150             | 11  | 9    | 30 | 16 | -10              |     | TC**1102** |
| S16M-STFCR/L11 | ○ | ●     | 16 | 150             | 15  | 11   | 35 | 20 | -6               |     | TC**1102** |
| S16R-STFCR/L11 | ● | ●     | 16 | 200             | 15  | 11   | 35 | 20 | -6               |     | TC**1102** |
| S20Q-STFCR/L11 | ○ | ○     | 20 | 180             | 18  | 13   | 36 | 25 | -3               |     | TC**1102** |
| S20S-STFCR/L11 | ● | ●     | 20 | 250             | 18  | 13   | 36 | 25 | -3               |     | TC**1102** |
| A12K-STFCR/L11 | * | ●     | ●  | 12              | 125 | 11,5 | 9  | 26 | 16               | -10 | TC**1102** |
| A16M-STFCR/L11 | * | ●     | ●  | 16              | 150 | 15,5 | 11 | 30 | 20               | -6  | TC**1102** |
| A20Q-STFCR/L11 | * | ●     | ●  | 20              | 180 | 19   | 13 | 36 | 25               | -3  | TC**1102** |
| S25Q-STFCR/L16 | ● | ○     | 25 | 180             | 23  | 17   | 49 | 32 | -6               |     | TC**16T3** |
| S25T-STFCR/L16 | ● | ●     | 25 | 300             | 23  | 17   | 49 | 32 | -6               |     | TC**16T3** |
| S32R-STFCR/L16 | ● | ●     | 32 | 200             | 30  | 22   | 50 | 40 | -10              |     | TC**16T3** |
| S32U-STFCR/L16 | ● | ●     | 32 | 350             | 30  | 22   | 50 | 40 | -10              |     | TC**16T3** |
| S40S-STFCR/L16 | ○ | ○     | 40 | 250             | 37  | 27   | 60 | 50 | -8               |     | TC**16T3** |
| S40V-STFCR/L16 | ● | ●     | 40 | 400             | 37  | 27   | 60 | 50 | -8               |     | TC**16T3** |
| A25R-STFCR/L16 | * | ●     | ●  | 25              | 200 | 24   | 17 | 45 | 32               | -6  | TC**16T3** |
| A32S-STFCR/L16 | * | ●     | ○  | 32              | 250 | 31   | 22 | 49 | 40               | -10 | TC**16T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                          |                         |                        |                        |
|-------------------|--------------------------|-------------------------|------------------------|------------------------|
|                   | Inserto                  | TC**1102**              | TC**16T3**             | TC**16T3**             |
|                   | ød                       | 12-20                   | 25                     | 32-40                  |
|                   | Vite                     | I60M2,5×6,5<br>(1,0 Nm) | I60M3,5×10<br>(2,7 Nm) | I60M3,5×12<br>(2,7 Nm) |
|                   | Vite (sottoplacchetta)   |                         |                        | SM5×8.65XA             |
|                   | Sottoplacchetta          |                         |                        | T16BS                  |
|                   | Chiave (vite)            | WT07IP                  | WT15IP                 | WT15IP                 |
|                   | Chiave (sottoplacchetta) |                         |                        | WH35L                  |

Codice sistema > A322

Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366



A

Tornitura

## TC\*\* Barre alesatrici in acciaio

| Inserto                                                                           |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Finitura                                                                          | Media Lavor.                                                                      | Sgrossatura                                                                       | Lavorazione Al.                                                                   | Lavor.- ghisa grigia                                                               | PCBN/PCD                                                                            |
| A141                                                                              | A142                                                                              | A143                                                                              | A145                                                                              | A143                                                                               | A187                                                                                |

B

Fresatura

C

Foratura

D

Informazioni  
tecniche

E

Indice

Codice sistema > A322

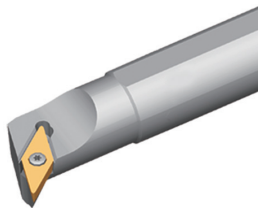
Scelta gradi > A42

Informazioni tecniche > A501

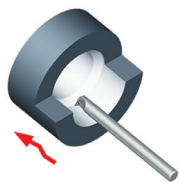
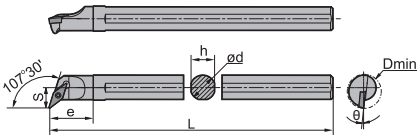
Dati di taglio > A366

**VC\*\* Barre alesatrici in acciaio** **S-Bloccaggio**

SVQCR/L Kr: 107°30'



Versione destra



| Articolo       | * | Stock |    | Dimensioni [mm] |    |    |    |    |                  |    | Inserto                                                                             |
|----------------|---|-------|----|-----------------|----|----|----|----|------------------|----|-------------------------------------------------------------------------------------|
|                |   | R     | L  | ød              | L  | h  | s  | e  | D <sub>min</sub> | θ  |  |
| S16Q-SVQCR/L11 | ● | ●     | 16 | 180             | 15 | 13 | 28 | 22 | -6               | -6 | VC**1103**                                                                          |
| S20R-SVQCR/L11 | ● | ○     | 20 | 200             | 18 | 15 | 32 | 26 | -4               | -4 | VC**1103**                                                                          |

● In magazzino ○ Su richiesta

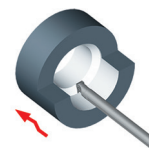
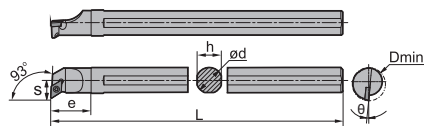
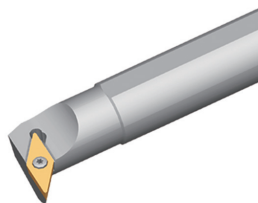
\* Con raffreddamento interno

| Parti di ricambio                                                                   |                |                         |
|-------------------------------------------------------------------------------------|----------------|-------------------------|
|                                                                                     | <b>Inserto</b> | <b>VC**1103**</b>       |
|                                                                                     | <b>ød</b>      | <b>16-20</b>            |
|  | Vite           | I60M2,5×6,5<br>(1,0 Nm) |
|  | Chiave (vite)  | WT07IP                  |

| Inserto                                                                             |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |
| <b>Finitura</b>                                                                     | <b>Lavorazione Al.</b>                                                              | <b>PCBN/PCD</b>                                                                     |
| A156                                                                                | A154                                                                                | A193                                                                                |

## VC\*\* Barre alesatrici in acciaio S-Bloccaggio

SVUCR/L Kr: 93°



Versione destra

| Articolo       |  | Stock |   | Dimensioni [mm] |     |    |    |                |    |                  |    | Inserto                                                                             |
|----------------|-----------------------------------------------------------------------------------|-------|---|-----------------|-----|----|----|----------------|----|------------------|----|-------------------------------------------------------------------------------------|
|                |                                                                                   | R     | L | ød              | L   | h  | s  | L <sub>2</sub> | e  | D <sub>min</sub> | θ  |  |
| S16Q-SVUCR/L11 |                                                                                   | ●     | ○ | 16              | 180 | 15 | 15 | 25             | 25 | 24               | -6 | VC**1103**                                                                          |
| S20R-SVUCR/L11 |                                                                                   | ●     | ● | 20              | 200 | 18 | 17 | 30             | 30 | 28               | -4 | VC**1103**                                                                          |
| S40U-SVUCR/L16 |                                                                                   |       | ○ | 40              | 350 | 37 | 27 | 56             | 56 | 50               | -8 | VC**1604**                                                                          |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

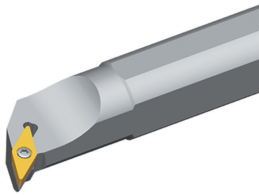
|  | Inserto                  | VC**1103**              | VC**1604**             |
|--|--------------------------|-------------------------|------------------------|
|  | ød                       | 16-20                   | 40                     |
|  | Vite                     | I60M2,5×6,5<br>(1,0 Nm) | I60M3,5×12<br>(2,7 Nm) |
|  | Vite (sottoplacchetta)   |                         | SM5×8,65XA<br>(4,0 Nm) |
|  | Sottoplacchetta          |                         | V16BSC                 |
|  | Chiave (vite)            | WT07IP                  | WT15IP                 |
|  | Chiave (sottoplacchetta) |                         | WH35L                  |

### Inserto

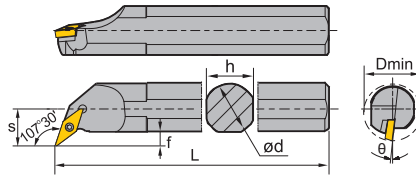
| Finitura | Media Lavor. | Lavorazione Al. | PCBN/PCD |
|----------|--------------|-----------------|----------|
| A156     | A156         | A154            | A193     |

**VB\*\* Barre alesatrici in acciaio** S-Bloccaggio

SVQBR/L Kr: 107°30'



Versione destra



| Articolo       | * | Stock |    | Dimensioni [mm] |     |    |    |     |     |                  |    | Inserto    |
|----------------|---|-------|----|-----------------|-----|----|----|-----|-----|------------------|----|------------|
|                |   | R     | L  | ød              | L   | h  | s  | e   | f   | D <sub>min</sub> | θ  |            |
| S32R-SVQBR/L16 | ● | ●     | 32 | 200             | 30  | 22 | 56 | 8,4 | 40  | -8               |    | VB**1604** |
| S32U-SVQBR/L16 | ● | ●     | 32 | 350             | 30  | 22 | 56 | 8,4 | 40  | -8               |    | VB**1604** |
| S40V-SVQBR/L16 | ● | ●     | 40 | 400             | 37  | 27 | 64 | 9,4 | 50  | -8               |    | VB**1604** |
| A32S-SVQBR/L16 | * | ○     | ○  | 32              | 250 | 31 | 22 | 56  | 8,4 | 40               | -8 | VB**1604** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

Parti di ricambio

|  | Inserto                  | VB**1604**             |
|--|--------------------------|------------------------|
|  | ød                       | 32-40                  |
|  | Vite                     | I60M3,5x12<br>(2,7 Nm) |
|  | Vite (sottopiacchetta)   | SM5x8.65XA             |
|  | Sottopiacchetta          | V16BS                  |
|  | Chiave (vite)            | WT15IP                 |
|  | Chiave (sottopiacchetta) | WH35L                  |

Inserto

|          |              |             |          |
|----------|--------------|-------------|----------|
|          |              |             |          |
| Finitura | Media Lavor. | Sgrossatura | PCBN/PCD |
| A148     | A151         | A152        | A191     |

Codice sistema > A322

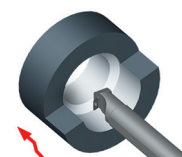
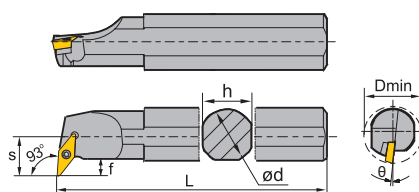
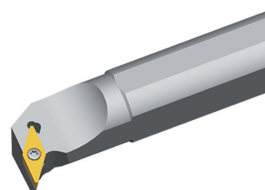
Scelta gradi > A42

Informazioni tecniche > A501

Dati di taglio > A366

## VB\*\* Barre alesatrici in acciaio S-Bloccaggio

SVUBR/L Kr: 93°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |     |    |    |      |     |                  |    | Inserto    |  |
|----------------|---|-------|---|-----------------|-----|----|----|------|-----|------------------|----|------------|--|
|                |   | R     | L | ød              | L   | h  | s  | e    | f   | D <sub>min</sub> | θ  |            |  |
| S32R-SVUBR/L16 |   | ●     | ○ | 32              | 200 | 30 | 22 | 49   | 8,4 | 40               | -8 | VB**1604** |  |
| S32U-SVUBR/L16 |   | ●     | ● | 32              | 350 | 30 | 22 | 49   | 8,4 | 40               | -8 | VB**1604** |  |
| S40S-SVUBR/L16 |   | ●     | ○ | 40              | 250 | 37 | 27 | 56,5 | 9,4 | 50               | -8 | VB**1604** |  |
| S40V-SVUBR/L16 |   | ●     | ● | 40              | 400 | 37 | 27 | 56,5 | 9,4 | 50               | -8 | VB**1604** |  |
| A32S-SVUBR/L16 | * | ●     | ● | 32              | 250 | 31 | 22 | 49   | 8,4 | 40               | -8 | VB**1604** |  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

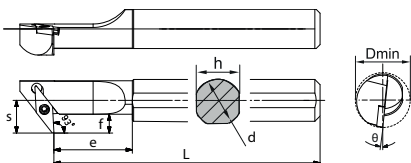
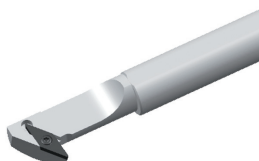
|  | Inserto                  | VB**1604**             |
|--|--------------------------|------------------------|
|  | ød                       | 32-40                  |
|  | Vite                     | I60M3,5x12<br>(2,7 Nm) |
|  | Vite (sottoplacchetta)   | SM5x8.65XA             |
|  | Sottoplacchetta          | V16BS                  |
|  | Chiave (vite)            | WT15IP                 |
|  | Chiave (sottoplacchetta) | WH35L                  |

### Inserto

|                 |                     |                    |                 |
|-----------------|---------------------|--------------------|-----------------|
|                 |                     |                    |                 |
| <b>Finitura</b> | <b>Media Lavor.</b> | <b>Sgrossatura</b> | <b>PCBN/PCD</b> |
| A148            | A151                | A152               | A191            |

**VB\*\* Barre alesatrici in acciaio S-Bloccaggio**

SVXBR/L Kr: 93°



Versione destra

| Articolo              | * | Stock |    | Dimensioni [mm] |    |      |    |      |    |                  |   | Inserto    |
|-----------------------|---|-------|----|-----------------|----|------|----|------|----|------------------|---|------------|
|                       |   | R     | L  | ød              | L  | h    | s  | e    | f  | D <sub>min</sub> | θ |            |
| S16P-SVXBR/L1102-KR93 | ○ | ○     | 16 | 170             | 15 | 12,5 | 30 | 72   | 21 | -8               |   | VB**1102** |
| S16P-SVXBR/L11-KR93   | ○ | ○     | 16 | 170             | 15 | 12,5 | 30 | 72   | 21 | -8               |   | VB**1103** |
| S20R-SVXBR/L11-KR93   | ○ | ○     | 20 | 187             | 20 | 13   | 22 | 5,7  | 25 | -8               |   | VB**1103** |
| S25S-SVXBR/L16-KR93   | ○ | ○     | 25 | 235             | 25 | 19   | 26 | 10,2 | 32 | -8               |   | VB**1604** |
| S32T-SVXBR/L16-KR93   | ○ | ○     | 32 | 280             | 32 | 22   | 80 | 11,7 | 40 | -8               |   | VB**1604** |
| S40M-SVXBR/L16-KR93   | ○ | ○     | 40 | 130             | 40 | 27   | 40 | 14,3 | 50 | -8               |   | VB**1604** |
| S40U-SVXBR/L16-KR93   | ○ | ○     | 40 | 330             | 40 | 27   | 90 | 14,3 | 50 | -8               |   | VB**1604** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                          |                         |                         |                        |
|-------------------|--------------------------|-------------------------|-------------------------|------------------------|
|                   | Inserto                  | VB**1102**              | VB**1103**              | VB**1604**             |
|                   | ød                       | 16-20                   | 16-20                   | 25-40                  |
|                   | Vite                     | I60M2,5×6,5<br>(1,0 Nm) | I60M2,5×6,5<br>(1,0 Nm) | I60M3,5×12<br>(2,7 Nm) |
|                   | Vite (sottoplacchetta)   |                         |                         | SM5×8,65XA<br>(4,0 Nm) |
|                   | Sottoplacchetta          |                         |                         | V16BS                  |
|                   | Chiave (vite)            |                         |                         | WT15IP                 |
|                   | Chiave (sottoplacchetta) |                         |                         | WH35L                  |
|                   | Chiave                   | WT07IP                  | WT07IP                  | WT15IP                 |

| Inserto  |              |             |          |
|----------|--------------|-------------|----------|
|          |              |             |          |
| Finitura | Media Lavor. | Sgrossatura | PCBN/PCD |
| A148     | A151         | A152        | A191     |

Codice sistema > A322

Scelta gradi > A42

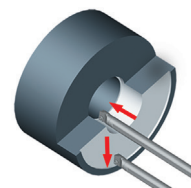
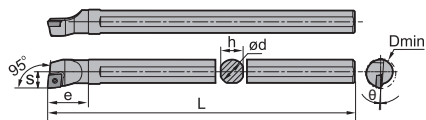
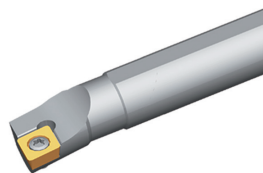
Informazioni tecniche > A501

Dati di taglio > A366



## CP\*\* Barre alesatrici in acciaio S-Bloccaggio

SCLPR/L Kr: 95°



Versione destra

| Articolo       | * | Stock |    | Dimensioni [mm] |    |    |    |    |                  |   | Inserto    |
|----------------|---|-------|----|-----------------|----|----|----|----|------------------|---|------------|
|                |   | R     | L  | ød              | L  | h  | s  | e  | D <sub>min</sub> | θ |            |
| S10K-SCLPR/L06 | ● | ●     | 10 | 125             | 9  | 6  | 17 | 12 | -7               |   | CP**0602** |
| S12M-SCLPR/L06 | ● | ●     | 12 | 150             | 11 | 8  | 20 | 16 | -4               |   | CP**0602** |
| S16Q-SCLPR/L09 | ● | ●     | 16 | 180             | 15 | 10 | 29 | 20 | -4               |   | CP**09T3** |
| S20R-SCLPR/L09 | ○ | ○     | 20 | 200             | 18 | 13 | 35 | 25 | -4               |   | CP**09T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|  | Inserto       | CP**0602**              | CP**09T3**            |
|--|---------------|-------------------------|-----------------------|
|  | ød            | 10-12                   | 20-25                 |
|  | Vite          | I60M2,5x5,5<br>(1,0 Nm) | I60M3,5x8<br>(2,7 Nm) |
|  | Chiave (vite) | WT07IP                  | WT15IP                |

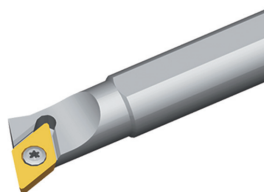
### Inserto

|          |              |                      |
|----------|--------------|----------------------|
|          |              |                      |
| Finitura | Media Lavor. | Lavor.- ghisa grigia |
| A124     | A124         | A124                 |

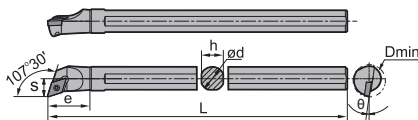


**DP\*\* Barre alesatrici in acciaio S-Bloccaggio**

SDQPR/L Kr: 107°30'



Versione destra



| Articolo       | * | Stock |    | Dimensioni [mm] |    |    |    |    |                  |    | Inserto    |
|----------------|---|-------|----|-----------------|----|----|----|----|------------------|----|------------|
|                |   | R     | L  | ød              | L  | h  | s  | e  | D <sub>min</sub> | θ  |            |
| S10K-SDQPR/L07 | ● | ●     | 10 | 125             | 9  | 7  | 20 | 13 | -8               | -8 | DP**0702** |
| S12M-SDQPR/L07 | ● | ●     | 12 | 150             | 11 | 9  | 22 | 16 | -8               | -8 | DP**0702** |
| S16Q-SDQPR/L07 | ● | ●     | 16 | 180             | 15 | 11 | 27 | 20 | -6               | -6 | DP**0702** |
| S16Q-SDQPR/L11 | ● | ●     | 16 | 180             | 15 | 11 | 32 | 20 | -6               | -6 | DP**11T3** |
| S20R-SDQPR/L11 | ○ | ○     | 20 | 200             | 18 | 13 | 33 | 25 | -6               | -6 | DP**11T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |               |                         |                         |                       |
|-------------------|---------------|-------------------------|-------------------------|-----------------------|
|                   | Inserto       | DP**0702**              | DP**0702**              | DP**11T3**            |
|                   | ød            | 10-12                   | 16                      | 16-20                 |
|                   | Vite          | I60M2,5x5,5<br>(1,0 Nm) | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x8<br>(2,7 Nm) |
|                   | Chiave (vite) | WT07IP                  | WT07IP                  | WT15IP                |

Inserto

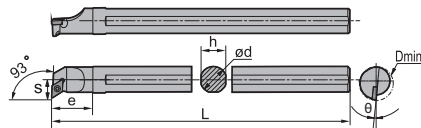
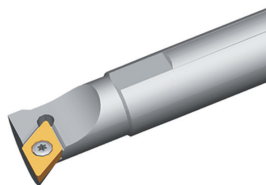


Finitura

A131

## DP\*\* Barre alesatrici in acciaio S-Bloccaggio

SDUPR/L Kr: 93°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |     |    |    |    |                  |    | Inserto                                                                             |  |
|----------------|---|-------|---|-----------------|-----|----|----|----|------------------|----|-------------------------------------------------------------------------------------|--|
|                |   | R     | L | ød              | L   | h  | s  | e  | D <sub>min</sub> | θ  |  |  |
| S10K-SDUPR/L07 |   | ●     | ● | 10              | 125 | 9  | 9  | 18 | 15               | -8 | DP**0702**                                                                          |  |
| S12M-SDUPR/L07 |   | ●     | ● | 12              | 150 | 11 | 9  | 19 | 16               | -8 | DP**0702**                                                                          |  |
| S16Q-SDUPR/L07 |   | ●     | ● | 16              | 180 | 15 | 11 | 25 | 20               | -6 | DP**0702**                                                                          |  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|                                                                                     | Inserto       | DP**0702**              | DP**0702**              |
|-------------------------------------------------------------------------------------|---------------|-------------------------|-------------------------|
|                                                                                     | ød            | 10-12                   | 16                      |
|  | Vite          | I60M2,5×5,5<br>(1,0 Nm) | I60M2,5×6,5<br>(1,0 Nm) |
|  | Chiave (vite) | WT07IP                  | WT07IP                  |

Inserto

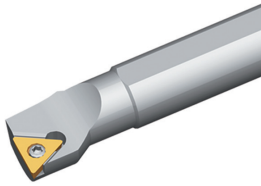


Finitura

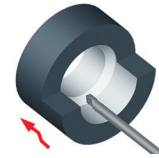
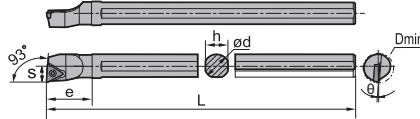
A131

**TP\*\* Barre alesatrici in acciaio** S-Bloccaggio

STUPR/L Kr: 93°



Versione destra



| Articolo       | * | Stock |    | Dimensioni [mm] |    |    |    |    |                  |   | Inserto    |
|----------------|---|-------|----|-----------------|----|----|----|----|------------------|---|------------|
|                |   | R     | L  | ød              | L  | h  | s  | e  | D <sub>min</sub> | θ |            |
| S10K-STUPR/L09 | • | •     | 10 | 125             | 9  | 6  | 20 | 12 | -6               | - | TP**0902** |
| S12M-STUPR/L09 | • | •     | 12 | 150             | 11 | 8  | 22 | 16 | -4               | - | TP**0902** |
| S12M-STUPR/L11 | • | •     | 12 | 150             | 11 | 8  | 25 | 16 | -4               | - | TP**1103** |
| S16Q-STUPR/L11 | • | •     | 16 | 180             | 15 | 10 | 27 | 20 | -3               | - | TP**1103** |

• In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |         |                         |                         |
|-------------------|---------|-------------------------|-------------------------|
|                   | Inserto | TP**0902**              | TP**1103**              |
|                   | ød      | 10-12                   | 12-16                   |
|                   | Vite    | I60M2,2x5,5<br>(0,8 Nm) | I60M2,5x6,5<br>(1,0 Nm) |
|                   | Chiave  | WT07IP                  | WT07IP                  |

Inserto

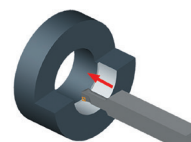
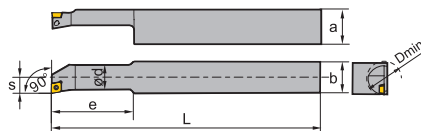
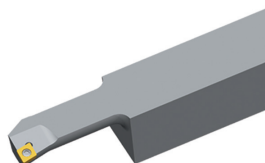


Finitura

A147

## CC\*\* Barre alesatrici in acciaio S-Bloccaggio

SCFCR/L Kr: 90°



| Articolo          | * | Stock |    | Dimensioni [mm] |    |     |    |    |    |                  | Inserto    |
|-------------------|---|-------|----|-----------------|----|-----|----|----|----|------------------|------------|
|                   |   | R     | L  | ød              | a  | b   | L  | s  | e  | D <sub>min</sub> |            |
| S10M-SCFCR/L06S25 | ● | ○     | 10 | 27              | 25 | 150 | 7  | 30 | 13 |                  | CC**0602** |
| S12P-SCFCR/L06S25 | ● |       | 12 | 27              | 25 | 170 | 9  | 35 | 16 |                  | CC**0602** |
| S16Q-SCFCR/L09S25 | ● | ○     | 16 | 27              | 25 | 180 | 11 | 40 | 20 |                  | CC**09T3** |
| S20R-SCFCR/L09S25 | ● |       | 20 | 27              | 25 | 200 | 13 | 45 | 25 |                  | CC**09T3** |
| S25R-SCFCR/L12S25 | ● | ●     | 25 | 27              | 25 | 200 | 17 | 50 | 32 |                  | CC**1204** |

● In magazzino ○ Su richiesta

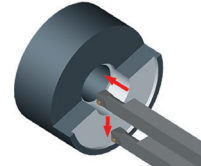
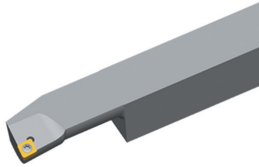
\* Con raffreddamento interno

| Parti di ricambio |         |                         |                       |                      |
|-------------------|---------|-------------------------|-----------------------|----------------------|
|                   | Inserto | CC**0602**              | CC**09T3**            | CC**1204**           |
|                   | ød      | 10-12                   | 16-20                 | 25                   |
|                   | Vite    | I60M2,5×5,5<br>(1,0 Nm) | I60M3,5×8<br>(2,7 Nm) | I60M4×12<br>(3,4 Nm) |
|                   | Chiave  | WT07IP                  | WT15IP                | WT20IP               |

| Inserto  |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A116     | A119         | A121        | A122            | A121                 | A180     |

**CC\*\* Barre alesatrici in acciaio** **S-Bloccaggio**

SCLCR Kr: 95°



| Articolo        | * | Stock | Dimensioni [mm] |    |    |     |    |    |                  | Inserto    |
|-----------------|---|-------|-----------------|----|----|-----|----|----|------------------|------------|
|                 |   |       | ød              | a  | b  | L   | s  | e  | D <sub>min</sub> |            |
| S10M-SCLCR06S20 | ○ | ○     | 10              | 22 | 20 | 150 | 7  | 30 | 13               | CC**0602** |
| S12P-SCLCR06S20 | ○ | ○     | 12              | 22 | 20 | 170 | 9  | 35 | 16               | CC**0602** |
| S16Q-SCLCR09S20 | ● | ●     | 16              | 22 | 20 | 180 | 11 | 40 | 20               | CC**09T3** |
| S20R-SCLCR09S20 | ● | ●     | 20              | 22 | 20 | 200 | 13 | 60 | 25               | CC**09T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|  | Inserto | CC**0602**              | CC**09T3**            |
|--|---------|-------------------------|-----------------------|
|  | ød      | 10-12                   | 16-20                 |
|  | Vite    | I60M2,5x5,5<br>(1,0 Nm) | I60M3,5x8<br>(2,7 Nm) |
|  | Chiave  | WT07IP                  | WT15IP                |

## Inserto

|          |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A116     | A119         | A121        | A122            | A121                 | A180     |

Codice sistema &gt; A322

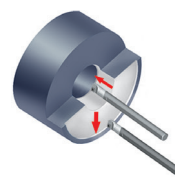
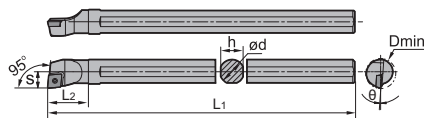
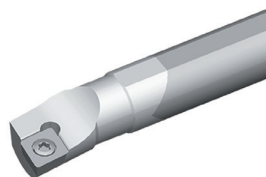
Scelta gradi &gt; A42

Informazioni tecniche &gt; A501

Dati di taglio &gt; A366

## CP\*\* Barre alesatrici in metallo duro integrale S-Bloccaggio

SCLPR/L Kr: 95°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |    |      |    |                |                |    | Inserto    |
|----------------|---|-------|---|-----------------|----|------|----|----------------|----------------|----|------------|
|                |   | R     | L | ØD              | ød | h    | s  | L <sub>1</sub> | L <sub>2</sub> | θ  |            |
| C10M-SCLPR/L06 | ● | ●     |   | 12              | 10 | 9    | 6  | 150            | 17             | 7  | CP**0602** |
| C12Q-SCLPR/L06 | ● | ○     |   | 16              | 12 | 11   | 8  | 180            | 20             | 4  | CP**0602** |
| C16R-SCLPR/L09 | ● | ●     |   | 20              | 16 | 15   | 10 | 200            | 29             | 4  | CP**09T3** |
| E16R-SCLPR/L09 | * | ○     | ○ | 19              | 16 | 15,5 | 10 | 200            | -              | -2 | CP**09T3** |
| C20S-SCLPR/L09 | ● | ○     |   | 25              | 20 | 18   | 13 | 250            | 35             | 4  | CP**09T3** |
| E20S-SCLPR/L09 | * | ○     |   | 24              | 20 | 19,5 | 13 | 250            | -              | -2 | CP**09T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

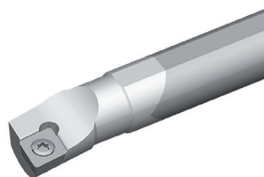
|  | Inserto       | CP**0602**              | CP**09T3**             |
|--|---------------|-------------------------|------------------------|
|  | ød            | 10-12                   | 16-20                  |
|  | Vite          | I60M2,5x5,5<br>(1,0 Nm) | I60M3,5x10<br>(2,7 Nm) |
|  | Chiave (vite) | WT07IP                  | WT15IP                 |

### Inserto

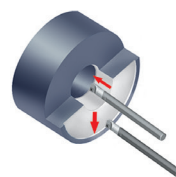
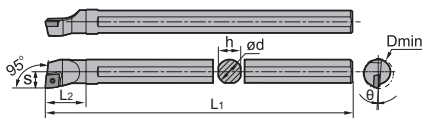
|          |              |                      |
|----------|--------------|----------------------|
|          |              |                      |
| Finitura | Media Lavor. | Lavor.- ghisa grigia |
| A124     | A124         | A124                 |

## CC\*\* Barre alesatrici in metallo duro integrale S-Bloccaggio

SCLCR/L Kr: 95°



Versione destra



| Articolo          | * | Stock |   | Dimensioni [mm] |    |      |    |                |                |     | Inserto    |
|-------------------|---|-------|---|-----------------|----|------|----|----------------|----------------|-----|------------|
|                   |   | R     | L | ØD              | ød | h    | s  | L <sub>1</sub> | L <sub>2</sub> | θ   |            |
| E08K-SCLCR/L06-09 | * | ●     | ● | 9               | 8  | 7,5  | 5  | 125            | -              | -12 | CC**0602** |
| E08K-SCLCR/L06-10 | * | ●     | ● | 10              | 8  | 7,5  | 6  | 125            | -              | -12 | CC**0602** |
| E10M-SCLCR/L06    | * | ●     | ● | 12              | 10 | 9,5  | 7  | 150            | -              | -10 | CC**0602** |
| E12Q-SCLCR/L06    | * | ●     | ● | 15              | 12 | 11,5 | 9  | 180            | -              | -10 | CC**0602** |
| E16R-SCLCR/L06    | * | ●     | ● | 18              | 16 | 15,5 | 10 | 200            | -              | -8  | CC**0602** |
| E12Q-SCLCR/L09    | * | ●     | ● | 15              | 12 | 11,5 | 9  | 180            | -              | -9  | CC**09T3** |
| E16R-SCLCR/L09    | * | ●     | ● | 18              | 16 | 15,5 | 10 | 200            | -              | -10 | CC**09T3** |
| E20S-SCLCR/L09    | * | ●     | ● | 24              | 20 | 19,5 | 13 | 250            | -              | -8  | CC**09T3** |
| E25T-SCLCR/L09    | * | ●     | ● | 31              | 25 | 24   | 17 | 300            | -              | -6  | CC**09T3** |

● In magazzino ○ Su richiesta

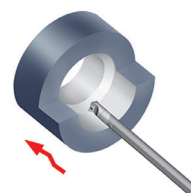
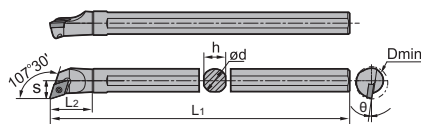
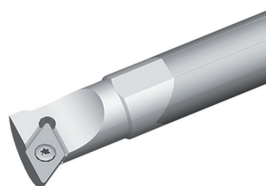
\* Con raffreddamento interno

| Parti di ricambio |               |                         |                       |                        |
|-------------------|---------------|-------------------------|-----------------------|------------------------|
|                   | Inserto       | CC**0602**              | CC**09T3**            | CC**09T3**             |
|                   | ød            | 8-16                    | 12                    | 16-25                  |
|                   | Vite          | I60M2,5x5,5<br>(1,0 Nm) | I60M3,5x8<br>(2,7 Nm) | I60M3,5x10<br>(2,7 Nm) |
|                   | Chiave (vite) | WT07IP                  | WT15IP                | WT15IP                 |

| Inserto  |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A116     | A119         | A121        | A122            | A121                 | A180     |

## DP\*\* Barre alesatrici in metallo duro integrale S-Bloccaggio

SDQPR/L Kr: 107°30'



Versione destra

| Articolo       | * | Stock |    | Dimensioni [mm] |    |    |     |                |                |   | Inserto    |
|----------------|---|-------|----|-----------------|----|----|-----|----------------|----------------|---|------------|
|                |   | R     | L  | ØD              | ød | h  | s   | L <sub>1</sub> | L <sub>2</sub> | θ |            |
| C10M-SDQPR/L07 | ● | ●     | 13 | 10              | 9  | 7  | 150 | 20             | 8              |   | DP**0702   |
| C12Q-SDQPR/L07 | ○ | ●     | 16 | 12              | 11 | 9  | 180 | 22             | 8              |   | DP**0702   |
| C16R-SDQPR/L07 | ○ | ○     | 20 | 16              | 15 | 11 | 200 | 27             | 6              |   | DP**0702   |
| C16R-SDQPR/L11 | ○ | ○     | 20 | 16              | 15 | 11 | 200 | 32             | 6              |   | DP**11T3** |
| C20S-SDQPR/L11 | ● | ○     | 25 | 20              | 18 | 13 | 250 | 33             | 6              |   | DP**11T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|  | Inserto       | DP**0702                | DP**0702                | DP**11T3**            |
|--|---------------|-------------------------|-------------------------|-----------------------|
|  | ød            | 10-12                   | 16                      | 16-20                 |
|  | Vite          | I60M2,5x5,5<br>(1,0 Nm) | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x8<br>(2,7 Nm) |
|  | Chiave (vite) | WT07IP                  | WT07IP                  | WT15IP                |

Inserto



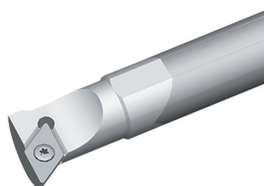
Finitura

A131

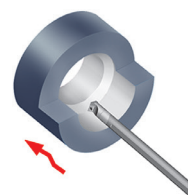
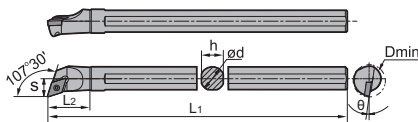


## DC\*\* Barre alesatrici in metallo duro integrale S-Bloccaggio

SDQCR/L Kr: 107°30'



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |      |     |                |                |     | Inserto    |
|----------------|---|-------|---|-----------------|----|------|-----|----------------|----------------|-----|------------|
|                |   | R     | L | ØD              | ød | h    | s   | L <sub>1</sub> | L <sub>2</sub> | θ   |            |
| E08K-SDQCR/L07 | * | ●     | ● | 11              | 8  | 7,5  | 6,5 | 125            | -              | -12 | DC**0702** |
| E10M-SDQCR/L07 | * | ●     | ● | 12              | 10 | 9,5  | 7   | 150            | -              | -10 | DC**0702** |
| E12Q-SDQCR/L07 | * | ●     | ● | 15              | 12 | 11,5 | 9   | 180            | -              | -10 | DC**0702** |
| E16R-SDQCR/L07 | * | ●     | ○ | 18              | 16 | 15,5 | 10  | 200            | 27-            | -6  | DC**0702** |
| E20S-SDQCR/L07 | * | ●     | ○ | 24              | 20 | 19,5 | 13  | 250            | 33-            | -4  | DC**0702** |
| E16R-SDQCR/L11 | * | ●     | ● | 18              | 16 | 15,5 | 10  | 200            | -              | -8  | DC**11T3** |
| E20S-SDQCR/L11 | * | ●     | ○ | 24              | 20 | 19,5 | 13  | 250            | -              | -8  | DC**11T3** |
| E25T-SDQCR/L11 | * | ●     | ○ | 31              | 25 | 24   | 17  | 300            | -              | -6  | DC**11T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

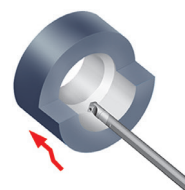
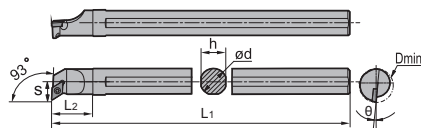
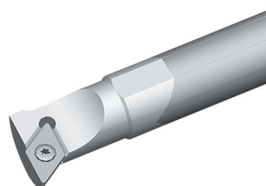
|  | Inserto       | DC**0702**              | DC**11T3**             |
|--|---------------|-------------------------|------------------------|
|  | ød            | 8-20                    | 16-25                  |
|  | Vite          | I60M2,5x5,5<br>(1,0 Nm) | I60M3,5x10<br>(2,7 Nm) |
|  | Chiave (vite) | WT07IP                  | WT15IP                 |

## Inserto

|          |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A126     | A127         | A129        | A129            | A129                 | A184     |

## DP\*\* Barre alesatrici in metallo duro integrale S-Bloccaggio

SDUPR/L Kr: 93°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |    |    |    |                |                |   | Inserto    |
|----------------|---|-------|---|-----------------|----|----|----|----------------|----------------|---|------------|
|                |   | R     | L | ØD              | ød | h  | s  | L <sub>1</sub> | L <sub>2</sub> | θ |            |
| C10M-SDUPR/L07 | ● | ●     |   | 15              | 10 | 9  | 9  | 150            | 18             | 8 | DP**0702** |
| C12Q-SDUPR/L07 | ● | ○     |   | 16              | 12 | 11 | 9  | 180            | 19             | 8 | DP**0702** |
| C16R-SDUPR/L07 | ○ | ○     |   | 20              | 16 | 15 | 11 | 200            | 25             | 6 | DP**0702** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|  | Inserto | DP**0702**              |
|--|---------|-------------------------|
|  | ød      | 15-20                   |
|  | Vite    | I60M2,5x5,5<br>(1,0 Nm) |
|  | Chiave  | WT07IP                  |

Inserto

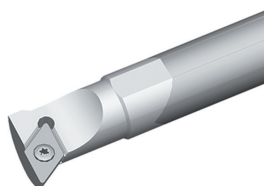


Finitura

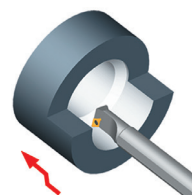
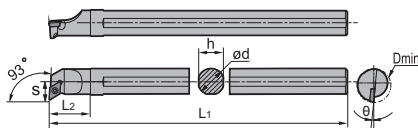
A131

**DC\*\* Barre alesatrici in metallo duro integrale S-Bloccaggio**

SDUCR/L Kr: 93°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |      |    |                |                |     | Inserto    |
|----------------|---|-------|---|-----------------|----|------|----|----------------|----------------|-----|------------|
|                |   | R     | L | ØD              | ød | h    | s  | L <sub>1</sub> | L <sub>2</sub> | θ   |            |
| E10M-SDUCR/L07 | * | ●     | ○ | 12              | 10 | 9,5  | 7  | 150            | -              | -10 | DC**0702** |
| E12Q-SDUCR/L07 | * | ●     | ● | 15              | 12 | 11,5 | 9  | 180            | -              | -10 | DC**0702** |
| E16R-SDUCR/L07 | * | ●     | ○ | 18              | 16 | 15,5 | 10 | 200            | -              | -6  | DC**0702** |
| E20S-SDUCR/L07 | * | ○     | ○ | 24              | 20 | 19,5 | 13 | 250            | -              | -4  | DC**0702** |
| E16R-SDUCR/L11 | * | ●     | ○ | 18              | 16 | 15,5 | 10 | 200            | -              | -8  | DC**11T3** |
| E20S-SDUCR/L11 | * | ●     | ● | 24              | 20 | 19,5 | 13 | 250            | -              | -8  | DC**11T3** |
| E25T-SDUCR/L11 | * | ○     | ○ | 31              | 25 | 24   | 17 | 300            | -              | -6  | DC**11T3** |

● In magazzino ○ Su richiesta

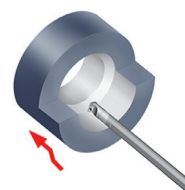
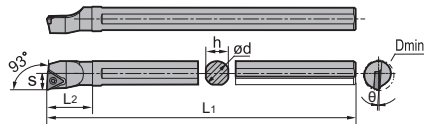
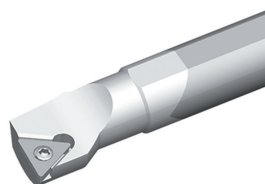
\* Con raffreddamento interno

| Parti di ricambio |               |                         |                        |
|-------------------|---------------|-------------------------|------------------------|
|                   | Inserto       | DC**0702**              | DC**11T3**             |
|                   | ød            | 10-20                   | 16-25                  |
|                   | Vite          | I60M2,5x5,5<br>(1,0 Nm) | I60M3,5x10<br>(2,7 Nm) |
|                   | Chiave (vite) | WT07IP                  | WT15IP                 |

| Inserto  |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A126     | A127         | A129        | A129            | A129                 | A184     |

## TP\*\* Barre alesatrici in metallo duro integrale S-Bloccaggio

STUPR/L Kr: 93°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |    |    |    |                |                |   | Inserto    |
|----------------|---|-------|---|-----------------|----|----|----|----------------|----------------|---|------------|
|                |   | R     | L | ØD              | ød | h  | s  | L <sub>1</sub> | L <sub>2</sub> | θ |            |
| C10M-STUPR/L09 | ○ | ○     |   | 12              | 10 | 9  | 6  | 150            | 20             | 6 | TP**0902** |
| C12Q-STUPR/L09 | ● |       |   | 16              | 12 | 11 | 8  | 180            | 22             | 4 | TP**0902** |
| C12Q-STUPR/L11 | ● |       |   | 16              | 12 | 11 | 8  | 180            | 25             | 4 | TP**1103   |
| C16R-STUPR/L11 | ○ | ○     |   | 20              | 16 | 15 | 10 | 200            | 27             | 3 | TP**1103   |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|  | Inserto       | TP**0902**              | TP**1103                |
|--|---------------|-------------------------|-------------------------|
|  | ød            | 10-12                   | 12-16                   |
|  | Vite          | I60M2,2x5,5<br>(0,8 Nm) | I60M2,5x6,5<br>(1,0 Nm) |
|  | Chiave (vite) | WT07IP                  | WT07IP                  |

Inserto

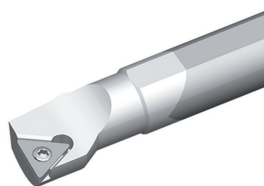


Finitura

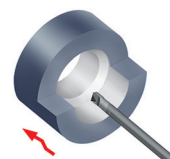
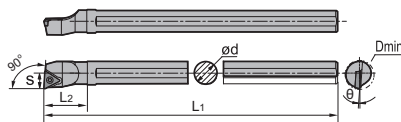
A147

## TC\*\* Barre alesatrici in metallo duro integrale S-Bloccaggio

STFCR/L Kr: 90°



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |      |    |                |                |     | Inserto    |
|----------------|---|-------|---|-----------------|----|------|----|----------------|----------------|-----|------------|
|                |   | R     | L | ØD              | ød | h    | s  | L <sub>1</sub> | L <sub>2</sub> | θ   |            |
| E08K-STFCR/L09 | * | ○     | ● | 11              | 8  | 7,5  | 6  | 125            | -              | -12 | TC**0902** |
| E10M-STFCR/L09 | * | ○     | ○ | 12              | 10 | 9,5  | 7  | 150            | -              | -10 | TC**0902** |
| E12Q-STFCR/L11 | * | ○     | ○ | 15              | 12 | 11,5 | 9  | 180            | -              | -10 | TC**1102** |
| E16R-STFCR/L11 | * | ○     | ○ | 18              | 16 | 15,5 | 10 | 200            | -              | -8  | TC**1102** |
| E20S-STFCR/L11 | * | ○     | ○ | 24              | 20 | 19,5 | 13 | 250            | -              | -8  | TC**1102** |
| E20S-STFCR/L16 | * | ○     | ○ | 24              | 20 | 19,5 | 13 | 250            | -              | -8  | TC**16T3** |
| E25T-STFCR/L16 | * | ○     | ○ | 31              | 25 | 24   | 17 | 300            | -              | -6  | TC**16T3** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

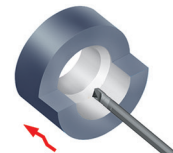
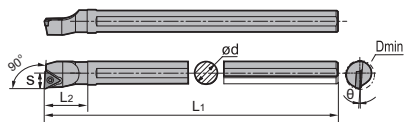
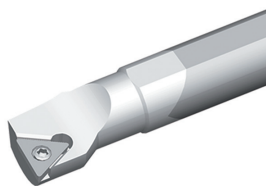
|  | Inserto       | TC**0902**              | TC**1102**              | TC**16T3**             |
|--|---------------|-------------------------|-------------------------|------------------------|
|  | ød            | 8-10                    | 12-20                   | 20-25                  |
|  | Vite          | I60M2,2x5,5<br>(0,8 Nm) | I60M2,5x5,5<br>(1,0 Nm) | I60M3,5x10<br>(2,7 Nm) |
|  | Chiave (vite) | WT07IP                  | WT07IP                  | WT15IP                 |

## Inserto

|          |              |             |                 |                      |          |
|----------|--------------|-------------|-----------------|----------------------|----------|
|          |              |             |                 |                      |          |
| Finitura | Media Lavor. | Sgrossatura | Lavorazione Al. | Lavor.- ghisa grigia | PCBN/PCD |
| A141     | A142         | A143        | A145            | A143                 | A187     |

## TC\*\* Barre alesatrici in metallo duro integrale S-Bloccaggio

STFPR/L Kr: 90°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |    |      |    |                |                |    | Inserto                                                                             |  |
|----------------|---|-------|---|-----------------|----|------|----|----------------|----------------|----|-------------------------------------------------------------------------------------|--|
|                |   | R     | L | ØD              | ød | h    | s  | L <sub>1</sub> | L <sub>2</sub> | θ  |  |  |
| E10M-STFPR/L11 | * | ○     | ○ | 12              | 10 | 9,5  | 6  | 150            | -              | -5 | TP**1103**                                                                          |  |
| E12Q-STFPR/L11 | * | ○     | ○ | 15              | 12 | 11,5 | 8  | 180            | -              | -4 | TP**1103**                                                                          |  |
| E16R-STFPR/L11 | * | ○     | ○ | 19              | 16 | 15,5 | 10 | 200            | -              | -2 | TP**1103**                                                                          |  |
| E20S-STFPR/L11 | * | ○     | ○ | 24              | 20 | 19   | 13 | 250            | -              | -2 | TP**1103**                                                                          |  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|                                                                                     |                |                         |
|-------------------------------------------------------------------------------------|----------------|-------------------------|
|                                                                                     | <b>Inserto</b> | <b>TP**1103**</b>       |
|                                                                                     | <b>ød</b>      | <b>10-20</b>            |
|  | Vite           | I60M3,0x7,0<br>(1,8 Nm) |
|  | Chiave (vite)  | WT08IP                  |

### Inserto

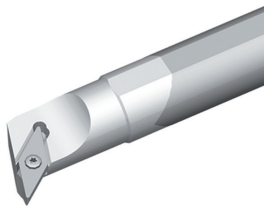


### Finitura

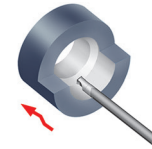
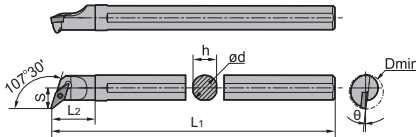
A147

**VC\*\* Barre alesatrici in metallo duro integrale S-Bloccaggio**

SVQCR/L Kr: 107°30'



Versione destra



| Articolo       | * | Stock |   | Dimensioni [mm] |    |    |    |                |                |    | Inserto                                                                             |
|----------------|---|-------|---|-----------------|----|----|----|----------------|----------------|----|-------------------------------------------------------------------------------------|
|                |   | R     | L | ØD              | ød | h  | s  | L <sub>1</sub> | L <sub>2</sub> | θ  |  |
| C16R-SVQCR/L11 |   | ○     | ○ | 22              | 16 | 15 | 13 | 200            | 28             | -6 | VC**1103**                                                                          |
| C20S-SVQCR/L11 |   | ○     | ○ | 26              | 20 | 18 | 15 | 250            | 32             | -4 | VC**1103**                                                                          |

● In magazzino ○ Su richiesta

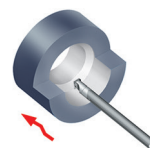
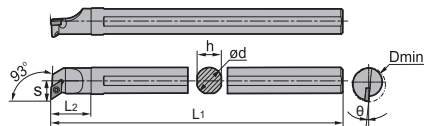
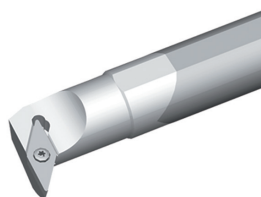
\* Con raffreddamento interno

| Parti di ricambio                                                                   |                |                         |
|-------------------------------------------------------------------------------------|----------------|-------------------------|
|                                                                                     | <b>Inserto</b> | <b>VC**1103**</b>       |
|                                                                                     | <b>ød</b>      | <b>16-20</b>            |
|  | Vite           | I60M2,5×6,5<br>(1,0 Nm) |
|  | Chiave (vite)  | WT07IP                  |

| Inserto                                                                             |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |
| <b>Finitura</b>                                                                     | <b>Lavorazione Al.</b>                                                              | <b>PCBN/PCD</b>                                                                     |
| A156                                                                                | A154                                                                                | A193                                                                                |

## VC\*\* Barre alesatrici in metallo duro integrale S-Bloccaggio

SVUCR/L Kr: 93°



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |    |    |      |                |                |      | Inserto    |
|----------------|---|-------|---|-----------------|----|----|------|----------------|----------------|------|------------|
|                |   | R     | L | ØD              | ød | h  | s    | L <sub>1</sub> | L <sub>2</sub> | θ    |            |
| C16R-SVUCR/L11 |   | ○     | ○ | 24              | 16 | 15 | 15   | 200            | 25             | 6    | VC**1103** |
| E16R-SVUCR/L11 | * | ○     | ○ | 22              | 16 | 15 | 13   | 200            | -              | -6,5 | VC**1103** |
| C20S-SVUCR/L11 |   | ●     | ● | 28              | 20 | 18 | 17   | 250            | 30             | 4    | VC**1103** |
| E20S-SVUCR/L11 | * | ○     | ○ | 27              | 20 | 18 | 13   | 250            | -              | -6,5 | VC**1103** |
| E25T-SVUCR/L16 | * | ○     | ○ | 35              | 25 | 23 | 20,5 | 300            | -              | -6,5 | VC**1604** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|               | Inserto<br>ød | VC**1103**<br>16-20     | VC**1604**<br>25       |
|---------------|---------------|-------------------------|------------------------|
| Vite          |               | I60M2,5×6,5<br>(1,0 Nm) | I60M3,5×10<br>(2,7 Nm) |
| Chiave (vite) |               | WT07IP                  | WT15IP                 |

### Inserto

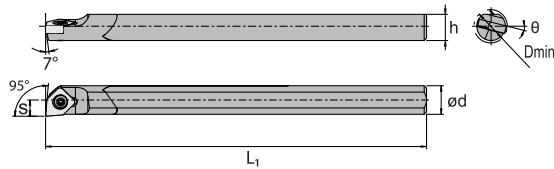
| Finitura | Media Lavor. | Lavorazione Al. | PCBN/PCD |
|----------|--------------|-----------------|----------|
| A156     | A156         | A154            | A193     |



## ZNEX Barre alesatrici in metallo duro integrale

S-Bloccaggio

SZLNR Kr: 95°



| Articolo     |  | Stock |   | Dimensioni [mm]  |    |     |     |                |                |     | Inserto                                                                             |
|--------------|-----------------------------------------------------------------------------------|-------|---|------------------|----|-----|-----|----------------|----------------|-----|-------------------------------------------------------------------------------------|
|              |                                                                                   | R     | L | D <sub>min</sub> | ød | h   | s   | L <sub>1</sub> | L <sub>2</sub> | θ   |  |
| C06X-SZLNR04 |                                                                                   | ●     |   | 7                | 6  | 5,5 | 3,4 | 80             | -              | -14 | ZNEX0401**                                                                          |

● In magazzino ○ Su richiesta

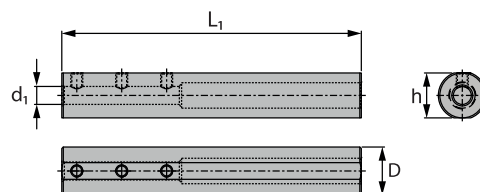
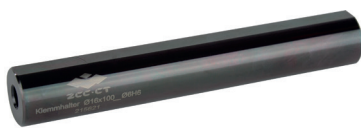
\* Con raffreddamento interno

### Parti di ricambio

|  | Inserto       | ZNEX0401**            |
|--|---------------|-----------------------|
|  | ød            | 6                     |
|  | Vite          | I60M2x3,7<br>(0,5 Nm) |
|  | Chiave (Vite) | WT06IP                |

## Portautensile C06X\*\*

SZLNR Kr: 95°



| Articolo        | Stock | Dimensioni [mm] |                |                |    |
|-----------------|-------|-----------------|----------------|----------------|----|
|                 |       | D               | d <sub>1</sub> | L <sub>1</sub> | h  |
| SHSZ1600.06.100 | •     | 16              | 6              | 100            | 15 |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|  |               |        |
|--|---------------|--------|
|  | Vite          | M4x5SH |
|  | Chiave (Vite) | WH20L  |

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## Inseriti per tornitura, negativi

| Gruppo materiali                                          |                                             | Composizione/Struttura/Trattamento termico    |                      | Durezza<br>HB Brinell | Gruppo di<br>sgrossatura | Velocità di taglio v <sub>c</sub> [m/min] |     |     |                  |     |     |                  |     |     |  |  |
|-----------------------------------------------------------|---------------------------------------------|-----------------------------------------------|----------------------|-----------------------|--------------------------|-------------------------------------------|-----|-----|------------------|-----|-----|------------------|-----|-----|--|--|
|                                                           |                                             |                                               |                      |                       |                          | HC (CVD)                                  |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             |                                               |                      |                       |                          | YBC103                                    |     |     | YB6315           |     |     | YBC152           |     |     |  |  |
|                                                           |                                             |                                               |                      |                       |                          | Avanzamento [mm]                          |     |     | Avanzamento [mm] |     |     | Avanzamento [mm] |     |     |  |  |
|                                                           |                                             | 0,1                                           | 0,2                  | 0,6                   | 0,1                      | 0,2                                       | 0,6 | 0,1 | 0,2              | 0,6 |     |                  |     |     |  |  |
| P                                                         | Acciaio non legato                          | ca. 0,15 % C                                  | Temprato             | 125                   | 1                        | 520                                       | 420 | 280 | 500              | 400 | 270 | 500              | 400 | 270 |  |  |
|                                                           |                                             | ca. 0,45 % C                                  | Temprato             | 190                   | 2                        | 440                                       | 360 | 250 | 420              | 340 | 230 | 420              | 340 | 230 |  |  |
|                                                           |                                             | ca. 0,45 % C                                  | pre-temprato         | 250                   | 3                        | 350                                       | 300 | 220 | 330              | 280 | 200 | 330              | 280 | 200 |  |  |
|                                                           |                                             | ca. 0,75 % C                                  | Temprato             | 270                   | 4                        | 340                                       | 290 | 210 | 320              | 270 | 190 | 320              | 270 | 190 |  |  |
|                                                           |                                             | ca. 0,75 % C                                  | pre-temprato         | 300                   | 5                        | 300                                       | 260 | 190 | 280              | 240 | 170 | 280              | 240 | 170 |  |  |
|                                                           | Acciaio al carbonio                         |                                               | Temprato             | 180                   | 6                        | 420                                       | 320 | 200 | 400              | 300 | 180 | 400              | 300 | 180 |  |  |
|                                                           |                                             |                                               | pre-temprato         | 275                   | 7                        | 300                                       | 250 | 170 | 280              | 230 | 150 | 280              | 230 | 150 |  |  |
|                                                           |                                             |                                               | pre-temprato         | 300                   | 8                        | 280                                       | 240 | 170 | 260              | 220 | 150 | 260              | 220 | 150 |  |  |
|                                                           |                                             |                                               | pre-temprato         | 350                   | 9                        | 250                                       | 210 | 140 | 230              | 190 | 120 | 230              | 190 | 120 |  |  |
| Acciaio alto legato e<br>acciaio alto legato per utensili |                                             | ricotto                                       | 200                  | 10                    | 380                      | 310                                       | 210 | 360 | 290              | 190 | 360 | 290              | 190 |     |  |  |
|                                                           |                                             | temprato e rinvenuto                          | 325                  | 11                    | 210                      | 180                                       | 150 | 190 | 160              | 130 | 190 | 160              | 130 |     |  |  |
| M                                                         | Acciaio inossidabile                        | ferritico/martensitico                        | ricotto              | 200                   | 12                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | martensitico                                  | pre-temprato         | 240                   | 13                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | austenitico                                   | quencing             | 180                   | 14                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | austenitico-ferritico                         |                      | 230                   | 15                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
| K                                                         | Ghisa grigia                                | perlitico/ferritico                           |                      | 180                   | 16                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | perlitico (martensitico)                      |                      | 260                   | 17                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           | Ghisa sferoidale                            | ferritico                                     |                      | 160                   | 18                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | perlitico                                     |                      | 250                   | 19                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           | Ghisa malleabile                            | ferritico                                     |                      | 130                   | 20                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | perlitico                                     |                      | 230                   | 21                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
| N                                                         | Lavorazioni plastiche di leghe di alluminio | non invecchiabile                             |                      | 60                    | 22                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | invecchiabile                                 | indurito             | 100                   | 23                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           | Leghe di alluminio fuso                     | ≤ 12 % Si, non invecchiabile                  |                      | 75                    | 24                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | ≤ 12 % Si, invecchiabile                      | indurito             | 90                    | 25                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | > 12 % Si, non invecchiabile                  |                      | 130                   | 26                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           | Rame e leghe di rame<br>(bronzo/ottone)     | Leghe per macchine di tipo multiplo, PB > 1 % |                      | 110                   | 27                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | CuZn, CuSnZn                                  |                      | 90                    | 28                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
| CuSn, rame senza piombo e rame elettrolitico              |                                             |                                               | 100                  | 29                    |                          |                                           |     |     |                  |     |     |                  |     |     |  |  |
| S                                                         | Leghe resistenti al calore                  | Base Fe                                       | ricotto              | 200                   | 30                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             |                                               | indurito             | 280                   | 31                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | Base Ni o Co                                  | ricotto              | 250                   | 32                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             |                                               | indurito             | 350                   | 33                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             |                                               | fuso                 | 320                   | 34                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           | Leghe di titanio                            | Titanio puro                                  |                      | R <sub>m</sub> 400    | 35                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | Leghe Alpha + Beta                            | indurito             | R <sub>m</sub> 1050   | 36                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
| H                                                         | Acciaio temprato                            |                                               | temprato e rinvenuto | 55 HRC                | 37                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             |                                               | temprato e rinvenuto | 60 HRC                | 38                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           | Ghisa dura                                  |                                               | fuso                 | 400                   | 39                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           | Ghise temprate                              |                                               | temprato e rinvenuto | 55 HRC                | 40                       |                                           |     |     |                  |     |     |                  |     |     |  |  |
| X                                                         | Materiali non metallici                     | Termoplastiche                                |                      | 41                    |                          |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | Termoindurenti                                |                      | 42                    |                          |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | Vetroresina VTR                               |                      | 43                    |                          |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | Plastica rinforzata in fibra di carbonio      |                      | 44                    |                          |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | Grafite                                       |                      | 45                    |                          |                                           |     |     |                  |     |     |                  |     |     |  |  |
|                                                           |                                             | Legno                                         |                      | 46                    |                          |                                           |     |     |                  |     |     |                  |     |     |  |  |

Note: I dati di taglio dati sono valori guida, che sono stati determinati in condizioni ideali.

A seconda dell'applicazione, devono essere adattati individualmente.

Esempi di materiali per gruppi di taglio sono disponibili a pagina D11.

|                 |                                                                                             |
|-----------------|---------------------------------------------------------------------------------------------|
| HC              | metallo duro rivestito                                                                      |
| HT              | metallo duro non rivestito, componente principale (TiC) o (TiN), Cermet                     |
| HW              | metallo duro non rivestito, componente principale (WC)                                      |
| BL              | nitruro di boro cubico-cristallino con basso contenuto di nitruro di boro                   |
| BH              | nitruro di boro cubico-cristallino con alto contenuto di nitruro di boro                    |
| CN              | ceramica $\text{Si}_3\text{N}_4$                                                            |
| CM              | ceramica mista                                                                              |
| HC <sub>1</sub> | cermet rivestito                                                                            |
| BC              | CBN rivestito                                                                               |
| CC              | ceramica rivestito                                                                          |
| CR              | ceramica, componente principale ossido di alluminio ( $\text{Al}_2\text{O}_3$ ), rinforzata |
| DP              | diamante policristallino                                                                    |

## Indice

## Inseriti per tornitura, negativi

| Gruppo materiali                             |                                                           | Composizione/Struttura/Trattamento termico    |                      | Durezza<br>HB Brinell | Gruppo di<br>sgrossatura | Velocità di taglio v <sub>c</sub> [m/min] |     |     |                  |      |     |                  |      |     |  |  |
|----------------------------------------------|-----------------------------------------------------------|-----------------------------------------------|----------------------|-----------------------|--------------------------|-------------------------------------------|-----|-----|------------------|------|-----|------------------|------|-----|--|--|
|                                              |                                                           |                                               |                      |                       |                          | HC (CVD)                                  |     |     | HC (PVD)         |      |     |                  |      |     |  |  |
|                                              |                                                           |                                               |                      |                       |                          | YBD152C                                   |     |     | YBG101           |      |     | YBG102           |      |     |  |  |
|                                              |                                                           |                                               |                      |                       |                          | Avanzamento [mm]                          |     |     | Avanzamento [mm] |      |     | Avanzamento [mm] |      |     |  |  |
|                                              |                                                           |                                               |                      |                       |                          | 0,1                                       | 0,3 | 0,5 | 0,1              | 0,3  | 0,6 | 0,1              | 0,3  | 0,6 |  |  |
| P                                            | Acciaio non legato                                        | ca. 0,15 % C                                  | Temprato             | 125                   | 1                        |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           | ca. 0,45 % C                                  | Temprato             | 190                   | 2                        |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           | ca. 0,45 % C                                  | pre-temprato         | 250                   | 3                        |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           | ca. 0,75 % C                                  | Temprato             | 270                   | 4                        |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           | ca. 0,75 % C                                  | pre-temprato         | 300                   | 5                        |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              | Acciaio al carbonio                                       |                                               | Temprato             | 180                   | 6                        |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           |                                               | pre-temprato         | 275                   | 7                        |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           |                                               | pre-temprato         | 300                   | 8                        |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           |                                               | pre-temprato         | 350                   | 9                        |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              | Acciaio alto legato e<br>acciaio alto legato per utensili |                                               | ricotto              | 200                   | 10                       |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           | temprato e rinvenuto                          | 325                  | 11                    |                          |                                           |     |     |                  |      |     |                  |      |     |  |  |
| M                                            | Acciaio inossidabile                                      | ferritico/martensitico                        | ricotto              | 200                   | 12                       |                                           |     |     |                  |      |     | 360              | 290  | 200 |  |  |
|                                              |                                                           | martensitico                                  | pre-temprato         | 240                   | 13                       |                                           |     |     |                  |      |     | 180              | 150  | 110 |  |  |
|                                              |                                                           | austenitico                                   | quencing             | 180                   | 14                       |                                           |     |     |                  |      |     | 240              | 190  | 140 |  |  |
|                                              |                                                           | austenitico-ferritico                         |                      | 230                   | 15                       |                                           |     |     |                  |      |     | 190              | 150  | 110 |  |  |
| K                                            | Ghisa grigia                                              | perlitico/ferritico                           |                      | 180                   | 16                       | 570                                       | 395 | 220 |                  |      |     |                  |      |     |  |  |
|                                              |                                                           | perlitico (martensitico)                      |                      | 260                   | 17                       | 310                                       | 230 | 150 |                  |      |     |                  |      |     |  |  |
|                                              | Ghisa sferoidale                                          | ferritico                                     |                      | 160                   | 18                       | 310                                       | 230 | 150 |                  |      |     |                  |      |     |  |  |
|                                              |                                                           | perlitico                                     |                      | 250                   | 19                       | 230                                       | 170 | 110 |                  |      |     |                  |      |     |  |  |
|                                              | Ghisa malleabile                                          | ferritico                                     |                      | 130                   | 20                       | 340                                       | 280 | 220 |                  |      |     |                  |      |     |  |  |
|                                              |                                                           | perlitico                                     |                      | 230                   | 21                       | 250                                       | 180 | 110 |                  |      |     |                  |      |     |  |  |
| N                                            | Lavorazioni plastiche di leghe di alluminio               | non invecchiabile                             |                      | 60                    | 22                       |                                           |     |     | 2000             | 1200 | –   | 2000             | 1200 | –   |  |  |
|                                              |                                                           | invecchiabile                                 | indurito             | 100                   | 23                       |                                           |     |     | 610              | 420  | –   | 610              | 420  | –   |  |  |
|                                              | Leghe di alluminio fuso                                   | ≤ 12 % Si, non invecchiabile                  |                      | 75                    | 24                       |                                           |     |     | 550              | 300  | –   | 550              | 300  | –   |  |  |
|                                              |                                                           | ≤ 12 % Si, invecchiabile                      | indurito             | 90                    | 25                       |                                           |     |     | 360              | 190  | –   | 360              | 190  | –   |  |  |
|                                              |                                                           | > 12 % Si, non invecchiabile                  |                      | 130                   | 26                       |                                           |     |     | 320              | 170  | –   | 320              | 170  | –   |  |  |
|                                              | Rame e leghe di rame<br>(bronzo/ottone)                   | Leghe per macchine di tipo multiplo, PB > 1 % |                      | 110                   | 27                       |                                           |     |     | 730              | 350  | –   | 730              | 350  | –   |  |  |
|                                              |                                                           | CuZn, CuSnZn                                  |                      | 90                    | 28                       |                                           |     |     | 370              | 330  | –   | 370              | 330  | –   |  |  |
| CuSn, rame senza piombo e rame elettrolitico |                                                           | 100                                           | 29                   |                       |                          |                                           | 270 | 200 | –                | 270  | 200 | –                |      |     |  |  |
| S                                            | Leghe resistenti al calore                                | Base Fe                                       | ricotto              | 200                   | 30                       |                                           |     |     |                  |      |     | 65               | 45   | –   |  |  |
|                                              |                                                           |                                               | indurito             | 280                   | 31                       |                                           |     |     |                  |      |     | 60               | 40   | –   |  |  |
|                                              |                                                           | Base Ni o Co                                  | ricotto              | 250                   | 32                       |                                           |     |     |                  |      |     | 60               | 40   | –   |  |  |
|                                              |                                                           |                                               | indurito             | 350                   | 33                       |                                           |     |     |                  |      |     | 55               | 35   | –   |  |  |
|                                              |                                                           |                                               | fuso                 | 320                   | 34                       |                                           |     |     |                  |      |     | 55               | 35   | –   |  |  |
|                                              | Leghe di titanio                                          | Titanio puro                                  |                      | R <sub>m</sub> 400    | 35                       |                                           |     |     |                  |      | 100 | 60               | –    |     |  |  |
|                                              |                                                           | Leghe Alpha + Beta                            | indurito             | R <sub>m</sub> 1050   | 36                       |                                           |     |     |                  |      | 80  | 40               | –    |     |  |  |
| H                                            | Acciaio temprato                                          |                                               | temprato e rinvenuto | 55 HRC                | 37                       |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           |                                               | temprato e rinvenuto | 60 HRC                | 38                       |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              | Ghisa dura                                                |                                               | fuso                 | 400                   | 39                       |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              | Ghise temprate                                            |                                               | temprato e rinvenuto | 55 HRC                | 40                       |                                           |     |     |                  |      |     |                  |      |     |  |  |
| X                                            | Materiali non metallici                                   | Termoplastiche                                |                      |                       | 41                       |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           | Termoindurenti                                |                      |                       | 42                       |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           | Vetroresina VTR                               |                      |                       | 43                       |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           | Plastica rinforzata in fibra di carbonio      |                      |                       | 44                       |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           | Grafite                                       |                      |                       | 45                       |                                           |     |     |                  |      |     |                  |      |     |  |  |
|                                              |                                                           | Legno                                         |                      |                       | 46                       |                                           |     |     |                  |      |     |                  |      |     |  |  |

Note: I dati di taglio dati sono valori guida, che sono stati determinati in condizioni ideali.

A seconda dell'applicazione, devono essere adattati individualmente.

Esempi di materiali per gruppi di taglio sono disponibili a pagina D11.

|                 |                                                                                             |
|-----------------|---------------------------------------------------------------------------------------------|
| HC              | metallo duro rivestito                                                                      |
| HT              | metallo duro non rivestito, componente principale (TiC) o (TiN), Cermet                     |
| HW              | metallo duro non rivestito, componente principale (WC)                                      |
| BL              | nitruro di boro cubico-cristallino con basso contenuto di nitruro di boro                   |
| BH              | nitruro di boro cubico-cristallino con alto contenuto di nitruro di boro                    |
| CN              | ceramica $\text{Si}_3\text{N}_4$                                                            |
| CM              | ceramica mista                                                                              |
| HC <sub>1</sub> | cermet rivestito                                                                            |
| BC              | CBN rivestito                                                                               |
| CC              | ceramica rivestito                                                                          |
| CR              | ceramica, componente principale ossido di alluminio ( $\text{Al}_2\text{O}_3$ ), rinforzata |
| DP              | diamante policristallino                                                                    |

## Inseriti per tornitura, negativi

| Gruppo materiali |                                                           | Composizione/Struttura/Trattamento termico    |                      | Durezza<br>HB Brinell | Gruppo di<br>sgrossatura | Velocità di taglio v <sub>c</sub> [m/min] |      |      |                  |      |     |                  |     |     |  |  |
|------------------|-----------------------------------------------------------|-----------------------------------------------|----------------------|-----------------------|--------------------------|-------------------------------------------|------|------|------------------|------|-----|------------------|-----|-----|--|--|
|                  |                                                           |                                               |                      |                       |                          | HW                                        |      |      |                  |      |     | BL               |     |     |  |  |
|                  |                                                           |                                               |                      |                       |                          | YD101                                     |      |      | YD201            |      |     | YCB112           |     |     |  |  |
|                  |                                                           |                                               |                      |                       |                          | Avanzamento [mm]                          |      |      | Avanzamento [mm] |      |     | Avanzamento [mm] |     |     |  |  |
|                  |                                                           |                                               |                      |                       |                          | 0,05                                      | 0,2  | 0,35 | 0,1              | 0,2  | 0,3 | 0,1              | 0,2 | 0,3 |  |  |
| P                | Acciaio non legato                                        | ca. 0,15 % C                                  | Temprato             | 125                   | 1                        |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | ca. 0,45 % C                                  | Temprato             | 190                   | 2                        |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | ca. 0,45 % C                                  | pre-temprato         | 250                   | 3                        |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | ca. 0,75 % C                                  | Temprato             | 270                   | 4                        |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | ca. 0,75 % C                                  | pre-temprato         | 300                   | 5                        |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  | Acciaio al carbonio                                       |                                               | Temprato             | 180                   | 6                        |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           |                                               | pre-temprato         | 275                   | 7                        |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           |                                               | pre-temprato         | 300                   | 8                        |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           |                                               | pre-temprato         | 350                   | 9                        |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  | Acciaio alto legato e<br>acciaio alto legato per utensili |                                               | ricotto              | 200                   | 10                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | temprato e rinvenuto                          | 325                  | 11                    |                          |                                           |      |      |                  |      |     |                  |     |     |  |  |
| M                | Acciaio inossidabile                                      | ferritico/martensitico                        | ricotto              | 200                   | 12                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | martensitico                                  | pre-temprato         | 240                   | 13                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | austenitico                                   | quencing             | 180                   | 14                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | austenitico-ferritico                         |                      | 230                   | 15                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
| K                | Ghisa grigia                                              | perlitico/ferritico                           |                      | 180                   | 16                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | perlitico (martensitico)                      |                      | 260                   | 17                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  | Ghisa sferoidale                                          | ferritico                                     |                      | 160                   | 18                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | perlitico                                     |                      | 250                   | 19                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  | Ghisa malleabile                                          | ferritico                                     |                      | 130                   | 20                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | perlitico                                     |                      | 230                   | 21                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
| N                | Lavorazioni plastiche di leghe di alluminio               | non invecchiabile                             |                      | 60                    | 22                       | 1750                                      | 1200 | 800  | 1750             | 1200 | 800 |                  |     |     |  |  |
|                  |                                                           | invecchiabile                                 | indurito             | 100                   | 23                       | 510                                       | 380  | 250  | 510              | 380  | 250 |                  |     |     |  |  |
|                  | Leghe di alluminio fuso                                   | ≤ 12 % Si, non invecchiabile                  |                      | 75                    | 24                       | 460                                       | 320  | 175  | 460              | 320  | 175 |                  |     |     |  |  |
|                  |                                                           | ≤ 12 % Si, invecchiabile                      | indurito             | 90                    | 25                       | 300                                       | 205  | 110  | 300              | 205  | 110 |                  |     |     |  |  |
|                  |                                                           | > 12 % Si, non invecchiabile                  |                      | 130                   | 26                       | 270                                       | 185  | 100  | 270              | 185  | 100 |                  |     |     |  |  |
|                  | Rame e leghe di rame<br>(bronzo/ottone)                   | Leghe per macchine di tipo multiplo, PB > 1 % |                      | 110                   | 27                       | 610                                       | 410  | 205  | 610              | 410  | 205 |                  |     |     |  |  |
|                  |                                                           | CuZn, CuSnZn                                  |                      | 90                    | 28                       | 310                                       | 250  | 195  | 310              | 250  | 195 |                  |     |     |  |  |
|                  |                                                           | CuSn, rame senza piombo e rame elettrolitico  |                      | 100                   | 29                       | 225                                       | 170  | 115  | 225              | 170  | 115 |                  |     |     |  |  |
| S                | Leghe resistenti al calore                                | Base Fe                                       | ricotto              | 200                   | 30                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           |                                               | indurito             | 280                   | 31                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | Base Ni o Co                                  | ricotto              | 250                   | 32                       |                                           |      |      |                  |      |     | 180              | 160 | 140 |  |  |
|                  |                                                           |                                               | indurito             | 350                   | 33                       |                                           |      |      |                  |      |     | 160              | 140 | 120 |  |  |
|                  |                                                           |                                               | fuso                 | 320                   | 34                       |                                           |      |      |                  |      |     | 120              | 100 | 80  |  |  |
|                  | Leghe di titanio                                          | Titanio puro                                  |                      | R <sub>m</sub> 400    | 35                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | Leghe Alpha + Beta                            | indurito             | R <sub>m</sub> 1050   | 36                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
| H                | Acciaio temprato                                          |                                               | temprato e rinvenuto | 55 HRC                | 37                       |                                           |      |      |                  |      |     | 220              | 170 | 130 |  |  |
|                  |                                                           |                                               | temprato e rinvenuto | 60 HRC                | 38                       |                                           |      |      |                  |      |     | 200              | 160 | 120 |  |  |
|                  | Ghisa dura                                                |                                               | fuso                 | 400                   | 39                       |                                           |      |      |                  |      |     | 200              | 150 | 100 |  |  |
|                  | Ghise temprate                                            |                                               | temprato e rinvenuto | 55 HRC                | 40                       |                                           |      |      |                  |      |     | 200              | 150 | 100 |  |  |
| X                | Materiali non metallici                                   | Termoplastiche                                |                      |                       | 41                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | Termoindurenti                                |                      |                       | 42                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | Vetroresina VTR                               |                      |                       | 43                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | Plastica rinforzata in fibra di carbonio      |                      |                       | 44                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | Grafite                                       |                      |                       | 45                       |                                           |      |      |                  |      |     |                  |     |     |  |  |
|                  |                                                           | Legno                                         |                      |                       | 46                       |                                           |      |      |                  |      |     |                  |     |     |  |  |

Note: I dati di taglio dati sono valori guida, che sono stati determinati in condizioni ideali.

A seconda dell'applicazione, devono essere adattati individualmente.

Esempi di materiali per gruppi di taglio sono disponibili a pagina D11.

|                 |                                                                                             |
|-----------------|---------------------------------------------------------------------------------------------|
| HC              | metallo duro rivestito                                                                      |
| HT              | metallo duro non rivestito, componente principale (TiC) o (TiN), Cermet                     |
| HW              | metallo duro non rivestito, componente principale (WC)                                      |
| BL              | nitruro di boro cubico-cristallino con basso contenuto di nitruro di boro                   |
| BH              | nitruro di boro cubico-cristallino con alto contenuto di nitruro di boro                    |
| CN              | ceramica $\text{Si}_3\text{N}_4$                                                            |
| CM              | ceramica mista                                                                              |
| HC <sub>1</sub> | cermet rivestito                                                                            |
| BC              | CBN rivestito                                                                               |
| CC              | ceramica rivestito                                                                          |
| CR              | ceramica, componente principale ossido di alluminio ( $\text{Al}_2\text{O}_3$ ), rinforzata |
| DP              | diamante policristallino                                                                    |

## Indice

## Inseriti per tornitura, negativi

|          | Gruppo materiali                                       | Composizione/Struttura/Trattamento termico    | Durezza HB Brinell   | Gruppo di sgrossatura | Velocità di taglio $v_c$ [m/min] |     |     |                  |     |     |                  |     |     |
|----------|--------------------------------------------------------|-----------------------------------------------|----------------------|-----------------------|----------------------------------|-----|-----|------------------|-----|-----|------------------|-----|-----|
|          |                                                        |                                               |                      |                       | BC                               |     |     | BH               |     |     | CM               |     |     |
|          |                                                        |                                               |                      |                       | YZB630C                          |     |     | YZB233           |     |     | CA1000           |     |     |
|          |                                                        |                                               |                      |                       | Avanzamento [mm]                 |     |     | Avanzamento [mm] |     |     | Avanzamento [mm] |     |     |
|          |                                                        |                                               |                      |                       | 0,1                              | 0,3 | 0,5 | 0,3              | 0,9 | 1,5 | 0,1              | 0,6 | 1,5 |
| <b>P</b> | Acciaio non legato                                     | ca. 0,15 % C                                  | Temprato             | 125                   | 1                                |     |     |                  |     |     |                  |     |     |
|          |                                                        | ca. 0,45 % C                                  | Temprato             | 190                   | 2                                |     |     |                  |     |     |                  |     |     |
|          |                                                        | ca. 0,45 % C                                  | pre-temprato         | 250                   | 3                                |     |     |                  |     |     |                  |     |     |
|          |                                                        | ca. 0,75 % C                                  | Temprato             | 270                   | 4                                |     |     |                  |     |     |                  |     |     |
|          |                                                        | ca. 0,75 % C                                  | pre-temprato         | 300                   | 5                                |     |     |                  |     |     |                  |     |     |
| <b>B</b> | Acciaio al carbonio                                    |                                               | Temprato             | 180                   | 6                                |     |     |                  |     |     |                  |     |     |
|          |                                                        |                                               | pre-temprato         | 275                   | 7                                |     |     |                  |     |     |                  |     |     |
|          |                                                        |                                               | pre-temprato         | 300                   | 8                                |     |     |                  |     |     |                  |     |     |
|          |                                                        |                                               | pre-temprato         | 350                   | 9                                |     |     |                  |     |     |                  |     |     |
|          | Acciaio alto legato e acciaio alto legato per utensili |                                               | ricotto              | 200                   | 10                               |     |     |                  |     |     |                  |     |     |
|          |                                                        |                                               | temprato e rinvenuto | 325                   | 11                               |     |     |                  |     |     |                  |     |     |
| <b>M</b> | Acciaio inossidabile                                   | ferritico/martensitico                        | ricotto              | 200                   | 12                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | martensitico                                  | pre-temprato         | 240                   | 13                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | austenitico                                   | quencing             | 180                   | 14                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | austenitico-ferritico                         |                      | 230                   | 15                               |     |     |                  |     |     |                  |     |     |
| <b>K</b> | Ghisa grigia                                           | perlitico/ferritico                           |                      | 180                   | 16                               |     |     | 1500             | 950 | 400 |                  |     |     |
|          |                                                        | perlitico (martensitico)                      |                      | 260                   | 17                               |     |     | 1250             | 780 | 320 |                  |     |     |
|          | Ghisa sferoidale                                       | ferritico                                     |                      | 160                   | 18                               |     |     | –                | –   | –   |                  |     |     |
|          |                                                        | perlitico                                     |                      | 250                   | 19                               |     |     | 500              | 300 | 100 |                  |     |     |
|          | Ghisa malleabile                                       | ferritico                                     |                      | 130                   | 20                               |     |     | –                | –   | –   |                  |     |     |
|          |                                                        | perlitico                                     |                      | 230                   | 21                               |     |     | 500              | 300 | 100 |                  |     |     |
| <b>N</b> | Lavorazioni plastiche di leghe di alluminio            | non invecchiabile                             |                      | 60                    | 22                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | invecchiabile                                 | indurito             | 100                   | 23                               |     |     |                  |     |     |                  |     |     |
|          | Leghe di alluminio fuso                                | ≤ 12 % Si, non invecchiabile                  |                      | 75                    | 24                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | ≤ 12 % Si, invecchiabile                      | indurito             | 90                    | 25                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | > 12 % Si, non invecchiabile                  |                      | 130                   | 26                               |     |     |                  |     |     |                  |     |     |
|          | Rame e leghe di rame (bronzo/ottone)                   | Leghe per macchine di tipo multiplo, PB > 1 % |                      | 110                   | 27                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | CuZn, CuSnZn                                  |                      | 90                    | 28                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | CuSn, rame senza piombo e rame elettrolitico  |                      | 100                   | 29                               |     |     |                  |     |     |                  |     |     |
| <b>S</b> | Leghe resistenti al calore                             | Base Fe                                       | ricotto              | 200                   | 30                               |     |     |                  |     |     |                  |     |     |
|          |                                                        |                                               | indurito             | 280                   | 31                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | Base Ni o Co                                  | ricotto              | 250                   | 32                               |     |     |                  |     |     |                  |     |     |
|          |                                                        |                                               | indurito             | 350                   | 33                               |     |     |                  |     |     |                  |     |     |
|          |                                                        |                                               | fuso                 | 320                   | 34                               |     |     |                  |     |     |                  |     |     |
|          | Leghe di titanio                                       | Titanio puro                                  |                      | R <sub>m</sub> 400    | 35                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | Leghe Alpha + Beta                            | indurito             | R <sub>m</sub> 1050   | 36                               |     |     |                  |     |     |                  |     |     |
| <b>H</b> | Acciaio temprato                                       |                                               | temprato e rinvenuto | 55 HRC                | 37                               | 220 | 170 | 130              |     |     | 180              | 150 | 120 |
|          |                                                        |                                               | temprato e rinvenuto | 60 HRC                | 38                               | 200 | 160 | 120              |     |     | 140              | 120 | 80  |
|          | Ghisa dura                                             |                                               | fuso                 | 400                   | 39                               | 200 | 150 | 100              |     |     | 80               | 60  | 40  |
|          | Ghise temprate                                         |                                               | temprato e rinvenuto | 55 HRC                | 40                               | 200 | 150 | 100              |     |     | –                | –   | –   |
| <b>X</b> | Materiali non metallici                                | Termoplastiche                                |                      |                       | 41                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | Termoindurenti                                |                      |                       | 42                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | Vetroresina VTR                               |                      |                       | 43                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | Plastica rinforzata in fibra di carbonio      |                      |                       | 44                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | Grafite                                       |                      |                       | 45                               |     |     |                  |     |     |                  |     |     |
|          |                                                        | Legno                                         |                      |                       | 46                               |     |     |                  |     |     |                  |     |     |

Note: I dati di taglio dati sono valori guida, che sono stati determinati in condizioni ideali.

A seconda dell'applicazione, devono essere adattati individualmente.

Esempi di materiali per gruppi di taglio sono disponibili a pagina D11.



|                 |                                                                                             |
|-----------------|---------------------------------------------------------------------------------------------|
| HC              | metallo duro rivestito                                                                      |
| HT              | metallo duro non rivestito, componente principale (TiC) o (TiN), Cermet                     |
| HW              | metallo duro non rivestito, componente principale (WC)                                      |
| BL              | nitruro di boro cubico-cristallino con basso contenuto di nitruro di boro                   |
| BH              | nitruro di boro cubico-cristallino con alto contenuto di nitruro di boro                    |
| CN              | ceramica $\text{Si}_3\text{N}_4$                                                            |
| CM              | ceramica mista                                                                              |
| HC <sub>1</sub> | cermet rivestito                                                                            |
| BC              | CBN rivestito                                                                               |
| CC              | ceramica rivestito                                                                          |
| CR              | ceramica, componente principale ossido di alluminio ( $\text{Al}_2\text{O}_3$ ), rinforzata |
| DP              | diamante policristallino                                                                    |

## Indice

## Inseriti per tornitura, positivi

|   | Gruppo materiali                                       | Composizione/Struttura/Trattamento termico    | Durezza HB Brinell   | Gruppo di sgrassatura | Velocità di taglio $v_c$ [m/min] |     |     |                  |     |     |                  |     |     |     |  |  |
|---|--------------------------------------------------------|-----------------------------------------------|----------------------|-----------------------|----------------------------------|-----|-----|------------------|-----|-----|------------------|-----|-----|-----|--|--|
|   |                                                        |                                               |                      |                       | HC (CVD)                         |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        |                                               |                      |                       | YBC103                           |     |     | YB6315           |     |     | YBC152           |     |     |     |  |  |
|   |                                                        |                                               |                      |                       | Avanzamento [mm]                 |     |     | Avanzamento [mm] |     |     | Avanzamento [mm] |     |     |     |  |  |
|   |                                                        |                                               |                      |                       | 0,1                              | 0,2 | 0,4 | 0,1              | 0,2 | 0,4 | 0,1              | 0,2 | 0,4 |     |  |  |
| P | Acciaio non legato                                     | ca. 0,15 % C                                  | Temprato             | 125                   | 1                                | 460 | 400 | 280              | 450 | 390 | 270              | 450 | 390 | 270 |  |  |
|   |                                                        | ca. 0,45 % C                                  | Temprato             | 190                   | 2                                | 390 | 340 | 240              | 380 | 330 | 230              | 380 | 330 | 230 |  |  |
|   |                                                        | ca. 0,45 % C                                  | pre-temprato         | 250                   | 3                                | 310 | 275 | 210              | 300 | 265 | 200              | 300 | 265 | 200 |  |  |
|   |                                                        | ca. 0,75 % C                                  | Temprato             | 270                   | 4                                | 300 | 265 | 200              | 290 | 255 | 190              | 290 | 255 | 190 |  |  |
|   |                                                        | ca. 0,75 % C                                  | pre-temprato         | 300                   | 5                                | 260 | 235 | 180              | 250 | 225 | 170              | 250 | 225 | 170 |  |  |
|   | Acciaio al carbonio                                    |                                               | Temprato             | 180                   | 6                                | 370 | 310 | 190              | 360 | 300 | 180              | 360 | 300 | 180 |  |  |
|   |                                                        |                                               | pre-temprato         | 275                   | 7                                | 260 | 220 | 160              | 250 | 210 | 150              | 250 | 210 | 150 |  |  |
|   |                                                        |                                               | pre-temprato         | 300                   | 8                                | 240 | 210 | 160              | 230 | 200 | 150              | 230 | 200 | 150 |  |  |
|   |                                                        |                                               | pre-temprato         | 350                   | 9                                | 210 | 180 | 130              | 200 | 170 | 120              | 200 | 170 | 120 |  |  |
|   | Acciaio alto legato e acciaio alto legato per utensili |                                               | ricotto              | 200                   | 10                               | 330 | 285 | 200              | 320 | 275 | 190              | 320 | 275 | 190 |  |  |
|   |                                                        |                                               | temprato e rinvenuto | 325                   | 11                               | 170 | 160 | 140              | 160 | 150 | 130              | 160 | 150 | 130 |  |  |
| M | Acciaio inossidabile                                   | ferritico/martensitico                        | ricotto              | 200                   | 12                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | martensitico                                  | pre-temprato         | 240                   | 13                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | austenitico                                   | quencing             | 180                   | 14                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | austenitico-ferritico                         |                      | 230                   | 15                               |     |     |                  |     |     |                  |     |     |     |  |  |
| K | Ghisa grigia                                           | perlitico/ferritico                           |                      | 180                   | 16                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | perlitico (martensitico)                      |                      | 260                   | 17                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   | Ghisa sferoidale                                       | ferritico                                     |                      | 160                   | 18                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | perlitico                                     |                      | 250                   | 19                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   | Ghisa malleabile                                       | ferritico                                     |                      | 130                   | 20                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | perlitico                                     |                      | 230                   | 21                               |     |     |                  |     |     |                  |     |     |     |  |  |
| N | Lavorazioni plastiche di leghe di alluminio            | non invecchiabile                             |                      | 60                    | 22                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | invecchiabile                                 | indurito             | 100                   | 23                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   | Leghe di alluminio fuso                                | ≤ 12 % Si, non invecchiabile                  |                      | 75                    | 24                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | ≤ 12 % Si, invecchiabile                      | indurito             | 90                    | 25                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | > 12 % Si, non invecchiabile                  |                      | 130                   | 26                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   | Rame e leghe di rame (bronzo/ottone)                   | Leghe per macchine di tipo multiplo, PB > 1 % |                      | 110                   | 27                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | CuZn, CuSnZn                                  |                      | 90                    | 28                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | CuSn, rame senza piombo e rame elettrolitico  |                      | 100                   | 29                               |     |     |                  |     |     |                  |     |     |     |  |  |
| S | Leghe resistenti al calore                             | Base Fe                                       | ricotto              | 200                   | 30                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        |                                               | indurito             | 280                   | 31                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | Base Ni o Co                                  | ricotto              | 250                   | 32                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        |                                               | indurito             | 350                   | 33                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        |                                               | fuso                 | 320                   | 34                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   | Leghe di titanio                                       | Titanio puro                                  |                      | R <sub>m</sub> 400    | 35                               |     |     |                  |     |     |                  |     |     |     |  |  |
| H | Acciaio temprato                                       |                                               | temprato e rinvenuto | 55 HRC                | 37                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        |                                               | temprato e rinvenuto | 60 HRC                | 38                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   | Ghisa dura                                             |                                               | fuso                 | 400                   | 39                               |     |     |                  |     |     |                  |     |     |     |  |  |
|   | Ghise temprate                                         |                                               | temprato e rinvenuto | 55 HRC                | 40                               |     |     |                  |     |     |                  |     |     |     |  |  |
| X | Materiali non metallici                                | Termoplastiche                                |                      | 41                    |                                  |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | Termoindurenti                                |                      | 42                    |                                  |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | Vetroresina VTR                               |                      | 43                    |                                  |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | Plastica rinforzata in fibra di carbonio      |                      | 44                    |                                  |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | Grafite                                       |                      | 45                    |                                  |     |     |                  |     |     |                  |     |     |     |  |  |
|   |                                                        | Legno                                         |                      | 46                    |                                  |     |     |                  |     |     |                  |     |     |     |  |  |

Note: I dati di taglio dati sono valori guida, che sono stati determinati in condizioni ideali.

A seconda dell'applicazione, devono essere adattati individualmente.

Esempi di materiali per gruppi di taglio sono disponibili a pagina D11.

|                 |                                                                                             |
|-----------------|---------------------------------------------------------------------------------------------|
| HC              | metallo duro rivestito                                                                      |
| HT              | metallo duro non rivestito, componente principale (TiC) o (TiN), Cermet                     |
| HW              | metallo duro non rivestito, componente principale (WC)                                      |
| BL              | nitruro di boro cubico-cristallino con basso contenuto di nitruro di boro                   |
| BH              | nitruro di boro cubico-cristallino con alto contenuto di nitruro di boro                    |
| CN              | ceramica $\text{Si}_3\text{N}_4$                                                            |
| CM              | ceramica mista                                                                              |
| HC <sub>1</sub> | cermet rivestito                                                                            |
| BC              | CBN rivestito                                                                               |
| CC              | ceramica rivestito                                                                          |
| CR              | ceramica, componente principale ossido di alluminio ( $\text{Al}_2\text{O}_3$ ), rinforzata |
| DP              | diamante policristallino                                                                    |

## Inseriti per tornitura, positivi

| Gruppo materiali |                                                           | Composizione/Struttura/Trattamento termico    |                      | Durezza<br>HB Brinell | Gruppo di<br>sgrossatura | Velocità di taglio v <sub>c</sub> [m/min] |     |     |                  |     |     |                  |     |     |   |  |  |
|------------------|-----------------------------------------------------------|-----------------------------------------------|----------------------|-----------------------|--------------------------|-------------------------------------------|-----|-----|------------------|-----|-----|------------------|-----|-----|---|--|--|
|                  |                                                           |                                               |                      |                       |                          | HC (CVD)                                  |     |     | HC (PVD)         |     |     |                  |     |     |   |  |  |
|                  |                                                           |                                               |                      |                       |                          | YBD152C                                   |     |     | YBG101           |     |     | YBG102           |     |     |   |  |  |
|                  |                                                           |                                               |                      |                       |                          | Avanzamento [mm]                          |     |     | Avanzamento [mm] |     |     | Avanzamento [mm] |     |     |   |  |  |
|                  |                                                           |                                               |                      |                       |                          | 0,1                                       | 0,2 | 0,4 | 0,1              | 0,2 | 0,4 | 0,1              | 0,2 | 0,4 |   |  |  |
| P                | Acciaio non legato                                        | ca. 0,15 % C                                  | Temprato             | 125                   | 1                        |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           | ca. 0,45 % C                                  | Temprato             | 190                   | 2                        |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           | ca. 0,45 % C                                  | pre-temprato         | 250                   | 3                        |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           | ca. 0,75 % C                                  | Temprato             | 270                   | 4                        |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           | ca. 0,75 % C                                  | pre-temprato         | 300                   | 5                        |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  | Acciaio al carbonio                                       |                                               | Temprato             | 180                   | 6                        |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           |                                               | pre-temprato         | 275                   | 7                        |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           |                                               | pre-temprato         | 300                   | 8                        |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           |                                               | pre-temprato         | 350                   | 9                        |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  | Acciaio alto legato e<br>acciaio alto legato per utensili |                                               | ricotto              | 200                   | 10                       |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           | temprato e rinvenuto                          | 325                  | 11                    |                          |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
| M                | Acciaio inossidabile                                      | ferritico/martensitico                        | ricotto              | 200                   | 12                       |                                           |     |     |                  |     |     | 305              | 245 | 205 |   |  |  |
|                  |                                                           | martensitico                                  | pre-temprato         | 240                   | 13                       |                                           |     |     |                  |     |     | 150              | 125 | 100 |   |  |  |
|                  |                                                           | austenitico                                   | quencing             | 180                   | 14                       |                                           |     |     |                  |     |     | 200              | 165 | 145 |   |  |  |
|                  |                                                           | austenitico-ferritico                         |                      | 230                   | 15                       |                                           |     |     |                  |     |     | 160              | 130 | 115 |   |  |  |
| K                | Ghisa grigia                                              | perlitico/ferritico                           |                      | 180                   | 16                       | 520                                       | 360 | 200 |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           | perlitico (martensitico)                      |                      | 260                   | 17                       | 280                                       | 210 | 135 |                  |     |     |                  |     |     |   |  |  |
|                  | Ghisa sferoidale                                          | ferritico                                     |                      | 160                   | 18                       | 280                                       | 220 | 135 |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           | perlitico                                     |                      | 250                   | 19                       | 210                                       | 160 | 100 |                  |     |     |                  |     |     |   |  |  |
|                  | Ghisa malleabile                                          | ferritico                                     |                      | 130                   | 20                       | 280                                       | 245 | 180 |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           | perlitico                                     |                      | 230                   | 21                       | 210                                       | 160 | 100 |                  |     |     |                  |     |     |   |  |  |
| N                | Lavorazioni plastiche di leghe di alluminio               | non invecchiabile                             |                      | 60                    | 22                       |                                           |     |     | 1800             | 880 | –   | 1800             | 880 | –   |   |  |  |
|                  |                                                           | invecchiabile                                 | indurito             | 100                   | 23                       |                                           |     |     | 540              | 380 | –   | 540              | 380 | –   |   |  |  |
|                  | Leghe di alluminio fuso                                   | ≤ 12 % Si, non invecchiabile                  |                      | 75                    | 24                       |                                           |     |     | 500              | 270 | –   | 500              | 270 | –   |   |  |  |
|                  |                                                           | ≤ 12 % Si, invecchiabile                      | indurito             | 90                    | 25                       |                                           |     |     | 320              | 170 | –   | 320              | 170 | –   |   |  |  |
|                  |                                                           | > 12 % Si, non invecchiabile                  |                      | 130                   | 26                       |                                           |     |     | 290              | 150 | –   | 290              | 150 | –   |   |  |  |
|                  | Rame e leghe di rame<br>(bronzo/ottone)                   | Leghe per macchine di tipo multiplo, PB > 1 % |                      | 110                   | 27                       |                                           |     |     | 660              | 320 | –   | 660              | 320 | –   |   |  |  |
|                  |                                                           | CuZn, CuSnZn                                  |                      | 90                    | 28                       |                                           |     |     | 330              | 300 | –   | 330              | 300 | –   |   |  |  |
|                  |                                                           | CuSn, rame senza piombo e rame elettrolitico  |                      | 100                   | 29                       |                                           |     |     | 220              | 175 | –   | 220              | 175 | –   |   |  |  |
| S                | Leghe resistenti al calore                                | Base Fe                                       | ricotto              | 200                   | 30                       |                                           |     |     |                  |     |     | 60               | 45  | –   |   |  |  |
|                  |                                                           |                                               | indurito             | 280                   | 31                       |                                           |     |     |                  |     |     | 55               | 40  | –   |   |  |  |
|                  |                                                           | Base Ni o Co                                  | ricotto              | 250                   | 32                       |                                           |     |     |                  |     |     |                  | 55  | 40  | – |  |  |
|                  |                                                           |                                               | indurito             | 350                   | 33                       |                                           |     |     |                  |     |     |                  | 50  | 35  | – |  |  |
|                  |                                                           |                                               | fuso                 | 320                   | 34                       |                                           |     |     |                  |     |     |                  | 50  | 35  | – |  |  |
|                  | Leghe di titanio                                          | Titanio puro                                  |                      | R <sub>m</sub> 400    | 35                       |                                           |     |     |                  |     |     | 95               | 60  | –   |   |  |  |
|                  |                                                           | Leghe Alpha + Beta                            | indurito             | R <sub>m</sub> 1050   | 36                       |                                           |     |     |                  |     |     | 75               | 40  | –   |   |  |  |
| H                | Acciaio temprato                                          |                                               | temprato e rinvenuto | 55 HRC                | 37                       |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           |                                               | temprato e rinvenuto | 60 HRC                | 38                       |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  | Ghisa dura                                                |                                               | fuso                 | 400                   | 39                       |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  | Ghise temprate                                            |                                               | temprato e rinvenuto | 55 HRC                | 40                       |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
| X                | Materiali non metallici                                   | Termoplastiche                                |                      |                       | 41                       |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           | Termoindurenti                                |                      |                       | 42                       |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           | Vetroresina VTR                               |                      |                       | 43                       |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           | Plastica rinforzata in fibra di carbonio      |                      |                       | 44                       |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           | Grafite                                       |                      |                       | 45                       |                                           |     |     |                  |     |     |                  |     |     |   |  |  |
|                  |                                                           | Legno                                         |                      |                       | 46                       |                                           |     |     |                  |     |     |                  |     |     |   |  |  |

Note: I dati di taglio dati sono valori guida, che sono stati determinati in condizioni ideali.

A seconda dell'applicazione, devono essere adattati individualmente.

Esempi di materiali per gruppi di taglio sono disponibili a pagina D11.

|                 |                                                                                             |
|-----------------|---------------------------------------------------------------------------------------------|
| HC              | metallo duro rivestito                                                                      |
| HT              | metallo duro non rivestito, componente principale (TiC) o (TiN), Cermet                     |
| HW              | metallo duro non rivestito, componente principale (WC)                                      |
| BL              | nitruro di boro cubico-cristallino con basso contenuto di nitruro di boro                   |
| BH              | nitruro di boro cubico-cristallino con alto contenuto di nitruro di boro                    |
| CN              | ceramica $\text{Si}_3\text{N}_4$                                                            |
| CM              | ceramica mista                                                                              |
| HC <sub>1</sub> | cermet rivestito                                                                            |
| BC              | CBN rivestito                                                                               |
| CC              | ceramica rivestito                                                                          |
| CR              | ceramica, componente principale ossido di alluminio ( $\text{Al}_2\text{O}_3$ ), rinforzata |
| DP              | diamante policristallino                                                                    |

## Indice

## Inseriti per tornitura, positivi

| Gruppo materiali                                          |                                             | Composizione/Struttura/Trattamento termico    |                      | Durezza<br>HB Brinell | Gruppo di<br>sgrossatura | Velocità di taglio $v_c$ [m/min] |      |     |                  |      |     |                  |     |     |  |  |
|-----------------------------------------------------------|---------------------------------------------|-----------------------------------------------|----------------------|-----------------------|--------------------------|----------------------------------|------|-----|------------------|------|-----|------------------|-----|-----|--|--|
|                                                           |                                             |                                               |                      |                       |                          | HW                               |      |     |                  |      |     | BL               |     |     |  |  |
|                                                           |                                             |                                               |                      |                       |                          | YD101                            |      |     | YD201            |      |     | YCB112           |     |     |  |  |
|                                                           |                                             |                                               |                      |                       |                          | Avanzamento [mm]                 |      |     | Avanzamento [mm] |      |     | Avanzamento [mm] |     |     |  |  |
|                                                           |                                             |                                               |                      |                       |                          | 0,1                              | 0,2  | 0,3 | 0,1              | 0,2  | 0,3 | 0,1              | 0,2 | 0,3 |  |  |
| P                                                         | Acciaio non legato                          | ca. 0,15 % C                                  | Temprato             | 125                   | 1                        |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | ca. 0,45 % C                                  | Temprato             | 190                   | 2                        |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | ca. 0,45 % C                                  | pre-temprato         | 250                   | 3                        |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | ca. 0,75 % C                                  | Temprato             | 270                   | 4                        |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | ca. 0,75 % C                                  | pre-temprato         | 300                   | 5                        |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           | Acciaio al carbonio                         |                                               | Temprato             | 180                   | 6                        |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             |                                               | pre-temprato         | 275                   | 7                        |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             |                                               | pre-temprato         | 300                   | 8                        |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             |                                               | pre-temprato         | 350                   | 9                        |                                  |      |     |                  |      |     |                  |     |     |  |  |
| Acciaio alto legato e<br>acciaio alto legato per utensili |                                             | ricotto                                       | 200                  | 10                    |                          |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | temprato e rinvenuto                          | 325                  | 11                    |                          |                                  |      |     |                  |      |     |                  |     |     |  |  |
| M                                                         | Acciaio inossidabile                        | ferritico/martensitico                        | ricotto              | 200                   | 12                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | martensitico                                  | pre-temprato         | 240                   | 13                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | austenitico                                   | quencing             | 180                   | 14                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | austenitico-ferritico                         |                      | 230                   | 15                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
| K                                                         | Ghisa grigia                                | perlitico/ferritico                           |                      | 180                   | 16                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | perlitico (martensitico)                      |                      | 260                   | 17                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           | Ghisa sferoidale                            | ferritico                                     |                      | 160                   | 18                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | perlitico                                     |                      | 250                   | 19                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           | Ghisa malleabile                            | ferritico                                     |                      | 130                   | 20                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | perlitico                                     |                      | 230                   | 21                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
| N                                                         | Lavorazioni plastiche di leghe di alluminio | non invecchiabile                             |                      | 60                    | 22                       | 1550                             | 1050 | 700 | 1550             | 1050 | 700 |                  |     |     |  |  |
|                                                           |                                             | invecchiabile                                 | indurito             | 100                   | 23                       | 450                              | 320  | 200 | 450              | 320  | 200 |                  |     |     |  |  |
|                                                           | Leghe di alluminio fuso                     | ≤ 12 % Si, non invecchiabile                  |                      | 75                    | 24                       | 400                              | 270  | 150 | 400              | 270  | 150 |                  |     |     |  |  |
|                                                           |                                             | ≤ 12 % Si, invecchiabile                      | indurito             | 90                    | 25                       | 250                              | 170  | 95  | 250              | 170  | 95  |                  |     |     |  |  |
|                                                           |                                             | > 12 % Si, non invecchiabile                  |                      | 130                   | 26                       | 230                              | 150  | 85  | 230              | 150  | 85  |                  |     |     |  |  |
|                                                           | Rame e leghe di rame<br>(bronzo/ottone)     | Leghe per macchine di tipo multiplo, PB > 1 % |                      | 110                   | 27                       | 550                              | 370  | 170 | 550              | 370  | 170 |                  |     |     |  |  |
|                                                           |                                             | CuZn, CuSnZn                                  |                      | 90                    | 28                       | 260                              | 210  | 160 | 260              | 210  | 160 |                  |     |     |  |  |
|                                                           |                                             | CuSn, rame senza piombo e rame elettrolitico  |                      | 100                   | 29                       | 190                              | 145  | 95  | 190              | 145  | 95  |                  |     |     |  |  |
| S                                                         | Leghe resistenti al calore                  | Base Fe                                       | ricotto              | 200                   | 30                       | 55                               | 30   | –   | 55               | 30   | –   | –                | –   | –   |  |  |
|                                                           |                                             |                                               | indurito             | 280                   | 31                       | 55                               | 25   | –   | 55               | 25   | –   | –                | –   | –   |  |  |
|                                                           |                                             | Base Ni o Co                                  | ricotto              | 250                   | 32                       | 45                               | 25   | –   | 45               | 25   | –   | 180              | 160 | 140 |  |  |
|                                                           |                                             |                                               | indurito             | 350                   | 33                       | 35                               | 20   | –   | 35               | 20   | –   | 160              | 140 | 120 |  |  |
|                                                           | Leghe di titanio                            |                                               | fuso                 | 320                   | 34                       | 40                               | 20   | –   | 40               | 20   | –   | 120              | 100 | 80  |  |  |
|                                                           |                                             | Titanio puro                                  |                      | R <sub>m</sub> 400    | 35                       | 60                               | 40   | –   | 60               | 40   | –   | –                | –   | –   |  |  |
| H                                                         | Acciaio temprato                            |                                               | indurito             | R <sub>m</sub> 1050   | 36                       | 30                               | –    | –   | 30               | –    | –   | –                | –   | –   |  |  |
|                                                           |                                             |                                               | temprato e rinvenuto | 55 HRC                | 37                       |                                  |      |     |                  |      |     | 220              | 170 | 130 |  |  |
|                                                           |                                             |                                               | temprato e rinvenuto | 60 HRC                | 38                       |                                  |      |     |                  |      |     | 200              | 160 | 120 |  |  |
|                                                           | Ghisa dura                                  |                                               | fuso                 | 400                   | 39                       |                                  |      |     |                  |      |     | 200              | 150 | 100 |  |  |
|                                                           | Ghise temprate                              |                                               | temprato e rinvenuto | 55 HRC                | 40                       |                                  |      |     |                  |      |     | 200              | 150 | 100 |  |  |
| X                                                         | Materiali non metallici                     | Termoplastiche                                |                      |                       | 41                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | Termoindurenti                                |                      |                       | 42                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | Vetroresina VTR                               |                      |                       | 43                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | Plastica rinforzata in fibra di carbonio      |                      |                       | 44                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | Grafite                                       |                      |                       | 45                       |                                  |      |     |                  |      |     |                  |     |     |  |  |
|                                                           |                                             | Legno                                         |                      |                       | 46                       |                                  |      |     |                  |      |     |                  |     |     |  |  |

Note: I dati di taglio dati sono valori guida, che sono stati determinati in condizioni ideali.

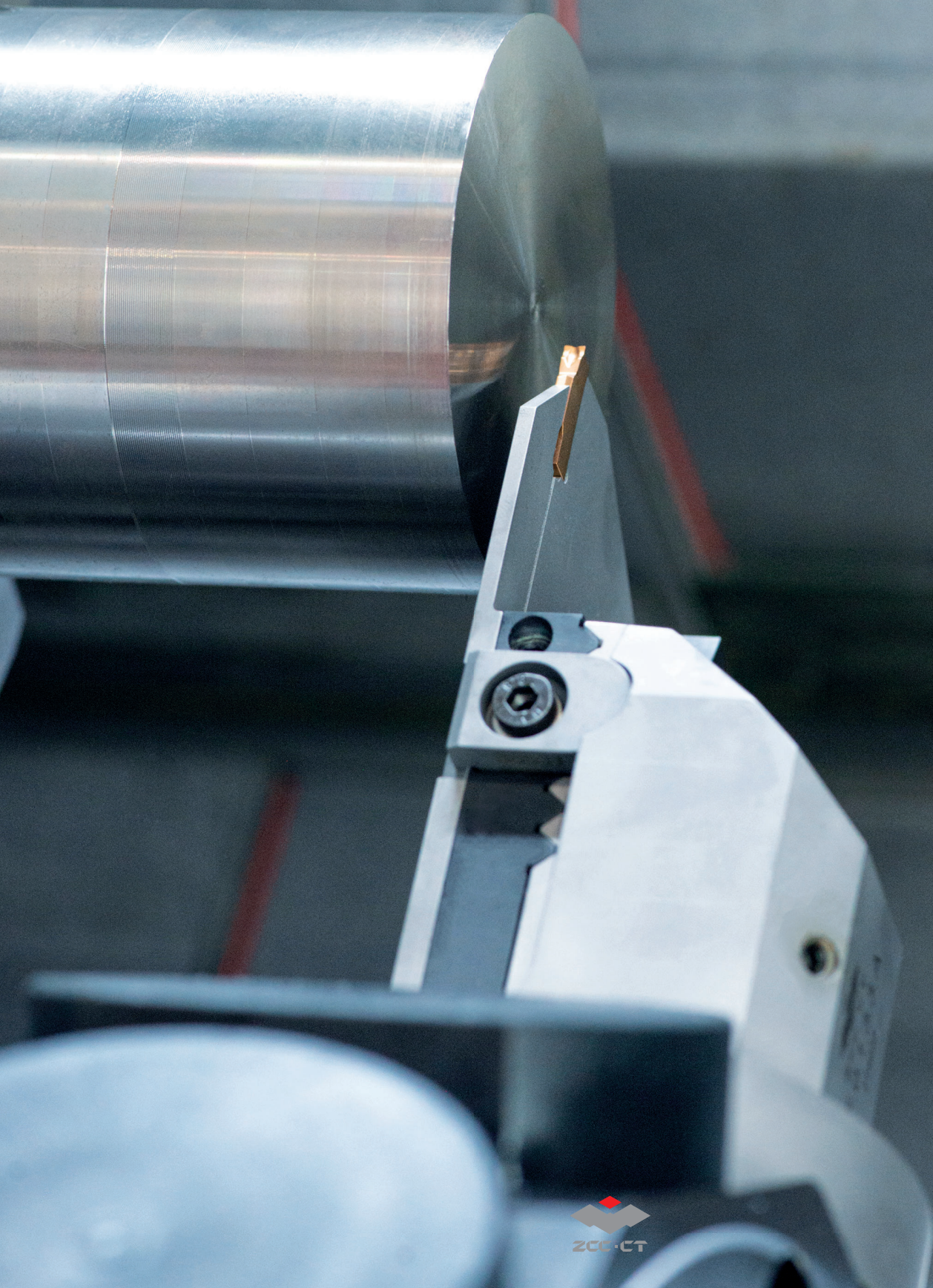
A seconda dell'applicazione, devono essere adattati individualmente.

Esempi di materiali per gruppi di taglio sono disponibili a pagina D11.

|                 |                                                                                             |
|-----------------|---------------------------------------------------------------------------------------------|
| HC              | metallo duro rivestito                                                                      |
| HT              | metallo duro non rivestito, componente principale (TiC) o (TiN), Cermet                     |
| HW              | metallo duro non rivestito, componente principale (WC)                                      |
| BL              | nitruro di boro cubico-cristallino con basso contenuto di nitruro di boro                   |
| BH              | nitruro di boro cubico-cristallino con alto contenuto di nitruro di boro                    |
| CN              | ceramica $\text{Si}_3\text{N}_4$                                                            |
| CM              | ceramica mista                                                                              |
| HC <sub>1</sub> | cermet rivestito                                                                            |
| BC              | CBN rivestito                                                                               |
| CC              | ceramica rivestito                                                                          |
| CR              | ceramica, componente principale ossido di alluminio ( $\text{Al}_2\text{O}_3$ ), rinforzata |
| DP              | diamante policristallino                                                                    |



# SCANALATURE E GOLE





## Scanalature e gole

|                                           |           |
|-------------------------------------------|-----------|
| Panoramica prodotti                       | A382-A383 |
| Panoramica sistema                        | A384-A385 |
| Posizionamento dell'utensile              | A386-A387 |
| Panoramica rompitruccioli                 | A388-A389 |
| Campo di applicazione dei rompitruccioli  | A390-A391 |
| Panoramica gradi                          | A392-A393 |
| Campo di applicazione dei gradi           | A394-A397 |
| Codice sistema – Inserti                  | A398      |
| Inserti                                   | A399-A415 |
| Codice sistema – Inserti – Serie QC       | A416      |
| Inserti – Serie QC                        | A417-A421 |
| Codice sistema – Portautensile            | A422-A424 |
| Portautensile                             | A425-A445 |
| Supporto monoblocco di precisione         | A446-A451 |
| Codice sistema – Portautensile – Serie QC | A452      |
| Portautensile – Serie QC                  | A453-A455 |
| Dati di taglio consigliati                | A456-A457 |
| Informazioni tecniche                     | A510      |
| Gli utensili speciali                     | A513      |

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## Inseri per scanalatura e troncatura

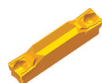
### Bilaterale



**ZT\*D-MM**

2-8

A399



**ZT\*D-MG**

2,5-6

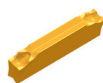
A404



**ZT\*\*\*-EG**

1-6,5

A407



**ZP\*D-MG**

2,5-6

A400



**ZP\*D-MG-R/L**

2,35-2,85

A401

Larghezza

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**ZR\*D-MG**

2,5-6

A410



**ZR\*D-EG**

3-6

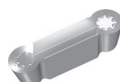
A411



**ZR\*D-LH**

6-8

A414



**ZILD-LC**

8

A415

Larghezza

Pagina

### Monolaterale



**ZT\*S-MM**

2,5-6

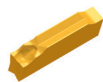
A406



**ZT\*S-MG**

5-6

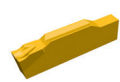
A405



**ZP\*S-MG**

2,5-6

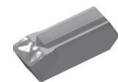
A402



**ZP\*S-MG-R/L**

2,5-3

A403



**ZIMF-NM**

3-6

A412



**ZIGQ-NM**

3-6

A413

Larghezza

Pagina

### A tre denti



**QC\*\*R/L**

0,75-4,8

A417



**QC\*\*R/L\*\*\*R**

1-4

A420

Larghezza

Pagina

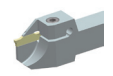
## Portautensili esterni

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| <b>GQC**R/L</b>                                                                   | <b>QE**R/L</b>                                                                    | <b>QE*S**N</b>                                                                    | <b>QE*S**N-1</b>                                                                  | <b>QE*SN30</b>                                                                    | <b>QE*SR/L</b>                                                                    | <b>QECDR/L</b>                                                                      |
| A453                                                                              | A425                                                                              | A431                                                                              | A432                                                                              | A427                                                                              | A430                                                                              | A428                                                                                |

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|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| <b>QF**R/L</b>                                                                    | <b>QF**RR/LL</b>                                                                  | <b>QF*DR/L</b>                                                                    | <b>QF*SRR/LL</b>                                                                  | <b>QFHSDR/L</b>                                                                   | <b>QX*DR/L</b>                                                                    | <b>QZS*</b>                                                                         |
| A434                                                                              | A436                                                                              | A439                                                                              | A438                                                                              | A441                                                                              | A429                                                                              | A433                                                                                |

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|                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |
| <b>QE**R/L-DGC</b>                                                                | <b>QE**R/L-DGSC</b>                                                               | <b>QE**R/L-SC</b>                                                                 |
| A446                                                                              | A448                                                                              | A449                                                                              |

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## Barre alesatrici

|                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |
| <b>Q*DR/L</b>                                                                       | <b>S*K-QC**R/L</b>                                                                  |
| A444                                                                                | A454                                                                                |

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|                        | Informazioni di sistema                                                                                                                                                                                                                                                                                                                                                                                                                             | Larghezza tagliente S | Profondità di scanalatura a, max | Scanalatura | Gole | Scanalatura a tuffo | Pag.             |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------------------|-------------|------|---------------------|------------------|
| <b>Sistema QE</b>      | <ul style="list-style-type: none"> <li>Sistema per la <b>scanalatura e gole radiale</b> e la <b>scanalatura a tuffo</b></li> <li>Portautensile disponibile per la lavorazione interna ed esterna</li> <li>Possibilità di refrigerazione mirata e trasmissione KSS diretta mediante il codolo</li> <li>Inseriti di taglio con uno e due taglienti</li> <li>Inseriti di taglio dedicati alla scanalatura di precisione</li> </ul>                     | 2,0–6,0 mm            | fino a 30,0 mm                   | ✓           | ✓    | ✓                   | ■ A425<br>● A444 |
| <b>Sistema QZ e QE</b> | <ul style="list-style-type: none"> <li>Sistema per la <b>scanalatura e troncatura radiale</b></li> <li>Combinazione di portatagliente e portautensile</li> <li>Sistema dotato di autobloccaggio</li> <li>Inseriti di taglio con un tagliente</li> <li>Impiego flessibile</li> </ul>                                                                                                                                                                 | 2,5–6,0 mm            | fino a 60,0 mm                   | ✓           | ✓    | —                   | ■ A431           |
| <b>Sistema QF</b>      | <ul style="list-style-type: none"> <li>Sistema per la <b>scanalatura assiale</b> e la <b>scanalatura a tuffo</b></li> <li>Area di prima scanalatura con Ø 48–400 mm</li> <li>Bloccaggio tramite viti per la massima stabilità</li> <li>Inseriti di taglio con due taglienti</li> <li>Portautensile disponibile in versione neutra e con angolazione di 90°</li> <li>Sottostruttura destra per M3</li> <li>Sottostruttura sinistra per M4</li> </ul> | 2,0–6,0 mm            | fino a 22,0 mm                   | ✓           | —    | ✓                   | ■ A434           |
| <b>Sistema QX</b>      | <ul style="list-style-type: none"> <li>Sistema per la <b>retro-tornitura</b></li> <li>Portacodolo con angolo di inclinazione di 45°</li> <li>Bloccaggio tramite viti per la massima stabilità</li> <li>Per inserti di tornitura con due taglienti</li> <li>Per lavorazioni di tornitura come ad esempio incavature e retro-torniture. Possibilità di impiego anche per operazioni di tornitura in copiatura</li> </ul>                              | 3,0–6,0 mm            | fino a 4,0 mm                    | ✓           | —    | ✓                   | ■ A429           |

■ Portautensili esterni  
 ● Barre alesatrici

|                       | Informazioni di sistema                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Larghezza tagliente S | Profondità di scanalatura a, max | Scanalatura | Gole | Scanalatura a tuffo | Pag.             |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------------------|-------------|------|---------------------|------------------|
| <b>Sistema C*X-Q</b>  | <ul style="list-style-type: none"> <li>Sistema speciale dedicato alla <b>lavorazione di ruote in alluminio</b></li> <li>Barra alesatrice con angolo di inclinazione di 15°</li> <li>Bloccaggio tramite viti per la massima stabilità</li> <li>Per inserti di scanalatura con due taglienti</li> <li>Area di prima scanalatura da Ø 160 mm</li> <li>Rompitrucoli speciali per la lavorazione dell'alluminio</li> </ul>                                                                                                                                                                                                                        | 6,0–8,0 mm            | fino a 80,0 mm                   | —           | —    | ✓                   | ● A443           |
| <b>Sistema QE*S*N</b> | <ul style="list-style-type: none"> <li>Sistema speciale dedicato a <b>materiali a difficile asportazione</b></li> <li>Rompitrucoli speciali per materiali a difficile asportazione</li> <li>Bloccaggio tramite viti per la massima stabilità</li> <li>Per inserti di scanalatura con un tagliente</li> </ul>                                                                                                                                                                                                                                                                                                                                 | 3,0–6,0 mm            | fino a 22,0 mm                   | ✓           | —    | ✓                   | ■ A430           |
| <b>Sistema QC</b>     | <ul style="list-style-type: none"> <li>Sistema per la <b>scanalatura di precisione</b></li> <li>Portautensile disponibile per la lavorazione esterna e interna</li> <li>Bloccaggio a vite tangenziale per un'elevata stabilità e rigidità</li> <li>3 taglienti per un'alta redditività</li> <li>Inserti rettificati con precisione e con tolleranze elevate</li> <li>Alta ripetibilità nella sostituzione del tagliente</li> <li>Inserti con tagliente dritto o circolare</li> <li>Particolarità della lavorazione interna: portautensile destro + inserto di taglio sinistro / portautensile sinistro + inserto di taglio destro</li> </ul> | 0,5–4,8 mm            | fino a 5,0 mm                    | ✓           | —    | —                   | ■ A453<br>● A454 |

■ Portautensili esterni  
● Barre alesatrici

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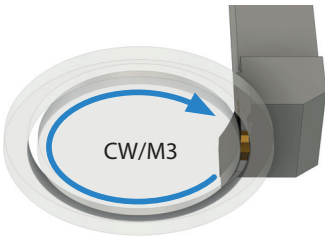
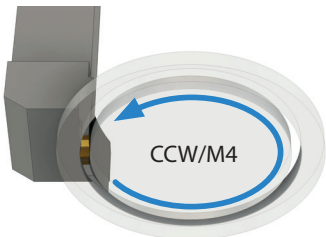
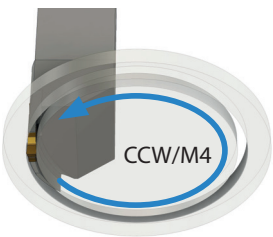
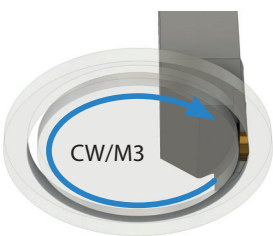
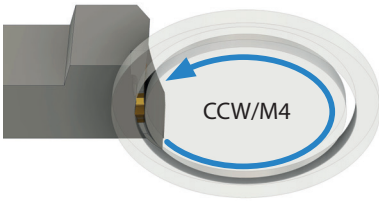
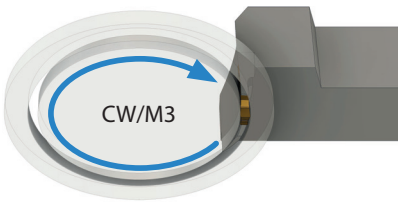
D

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## Versioni dei portautensili per la lavorazione assiale

| Portautensile                                        | Posizionamento dell'utensile                                                         |
|------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>A</b><br>Tornitura<br>QFFD****L**-**H             |    |
| <b>B</b><br>Fresatura<br>QFFD****R**-**H             |    |
| <b>C</b><br>Foratura<br>QFFD****LL**-**H             |   |
| QFFD****RR**-**H                                     |  |
| <b>D</b><br>Informazioni tecniche<br>QFFD****L**-**L |  |
| <b>E</b><br>Indice<br>QFFD****R**-**L                |  |

[illegible]

## Tornitura

## Fresatura

## Foratura

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**A**

Tornitura

Scanalatura

MM

P

M

K

S



Rompitruciolo sinterizzato con tagliente diritto per la lavorazione generale di acciaio, acciaio inox, ghisa e materiali difficili da lavorare. Può essere utilizzato per scanalatura, tornitura e troncatura.

**B**

Fresatura

MG

P

M

K

S



Rompitruciolo sinterizzato per la lavorazione generale di acciaio, acciaio inox, ghisa e materiali difficili da lavorare. Può essere utilizzato per scanalatura, tornitura e troncatura.

**C**

Foratura

MG

P

M

K

S



Rompitruciolo universale con profilo tondo per lavorazione generica di acciaio, acciaio inossidabile e ghise. Utilizzabile per gole e gole/tornitura.

**D**

Informazioni tecniche

EG

M

P

S



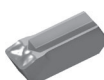
Rompitruciolo di precisione rettificato per lavorazioni di scanalatura e tornitura. Adatto per la lavorazione di acciaio inossidabile Classe E per una migliore ripetibilità.

**E**

Indice

NM

S



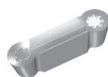
Rompitruciolo speciale per la lavorazione di materiali a difficile asportazione.



## Scanalatura

LC

N



Rompitrucciolo rettificato per contornatura e tornitura di metalli non ferrosi.

LH

N



Rompitrucciolo rettificato per contornatura e tornitura di metalli non ferrosi.

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| Rompitruciolo | Applicazione          | P | M | K | N | S | H | Avanzamento | Versione tagliente |
|---------------|-----------------------|---|---|---|---|---|---|-------------|--------------------|
| ZT****-MM     | Scanalature e gole ✓  |   |   |   |   |   |   |             |                    |
|               | Scanalatura a tuffo ✓ | ✓ | ✓ | ✓ |   | ✓ |   |             |                    |
| ZP****-MG     | Scanalature e gole ✓  |   |   |   |   |   |   |             |                    |
|               | Scanalatura a tuffo — | ✓ | ✓ | ✓ |   | ✓ |   |             |                    |
| ZT****-MG     | Scanalature e gole ✓  |   |   |   |   |   |   |             |                    |
|               | Scanalatura a tuffo ✓ | ✓ | ✓ | ✓ |   | ✓ |   |             |                    |
| ZR****-MG     | Scanalature e gole ✓  |   |   |   |   |   |   |             |                    |
|               | Scanalatura a tuffo ✓ | ✓ | ✓ | ✓ |   | ✓ |   |             |                    |
| ZT****-EG     | Scanalature e gole ✓  |   |   |   |   |   |   |             |                    |
|               | Scanalatura a tuffo ✓ | ✓ | ✓ | ✓ |   | ✓ |   |             |                    |
| ZR****-EG     | Scanalature e gole ✓  |   |   |   |   |   |   |             |                    |
|               | Scanalatura a tuffo ✓ | ✓ | ✓ | ✓ |   | ✓ |   |             |                    |
| ZI****-NM     | Scanalature e gole ✓  |   |   |   |   |   |   |             |                    |
|               | Scanalatura a tuffo ✓ |   | ✓ |   | ✓ | ✓ |   |             |                    |

✓ Molto adatto

✓ Adatto

■ Scanalature e gole

■ Scanalatura a tuffo

| Rompitruciolo | Applicazione          | P | M | K | N | S | H | Avanzamento | Versione tagliente   |
|---------------|-----------------------|---|---|---|---|---|---|-------------|----------------------|
| ZR****-LH     | Scanalature e gole ✓  |   |   |   |   |   |   |             | <p>Profilo tondo</p> |
|               | Scanalatura a tuffo ✓ |   |   |   | ✓ | ✓ |   |             |                      |
| ZI****-LC     | Scanalature e gole ✓  |   |   |   |   |   |   |             | <p>Profilo tondo</p> |
|               | Scanalatura a tuffo ✓ |   |   |   | ✓ | ✓ |   |             |                      |

✓ Molto adatto

✓ Adatto

■ Scanalature e gole

■ Scanalatura a tuffo

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

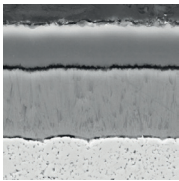
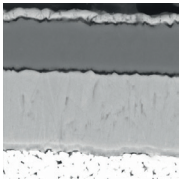
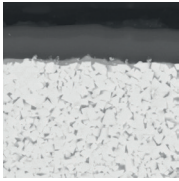
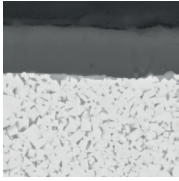
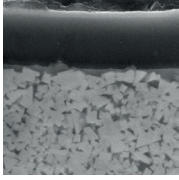
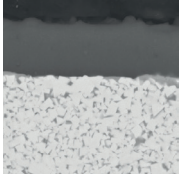
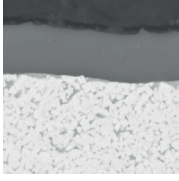
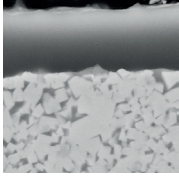
**D**

Informazioni  
tecniche

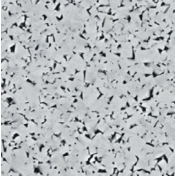
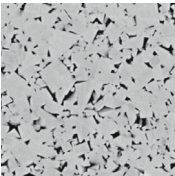
**E**

Indice

## Scanalature e troncatura

| Grado    | ISO           | Microstruttura                                                                      | Descrizione gradi                                                                                                                                                                                                                                                                                                                                                         |
|----------|---------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | <b>YBC252</b> |    | Grado di metallo duro con rivestimento in CVD P20-P35 adatto per lavorazioni dall'asportazione media alla sgrossatura di acciaio e acciaio fuso. Resistenza all'usura e tenacità ottimizzata per un ampio campo di applicazioni.                                                                                                                                          |
|          |               |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                           |
| <b>B</b> | <b>YBC251</b> |    | Grado di metallo duro con rivestimento in CVD P20-P35 adatto per lavorazioni dall'asportazione media alla sgrossatura di acciaio e acciaio fuso per basse velocità di taglio.                                                                                                                                                                                             |
|          |               |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                           |
| <b>C</b> | <b>YBG105</b> |    | Grado di metallo duro con rivestimento multistrato in PVD S05-S20 adatto per lavorazioni dalla finitura all'asportazione media di superleghe ma anche di acciai inossidabili. Ottima resistenza all'usura e alla temperatura in una vasta gamma di applicazioni                                                                                                           |
|          |               |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                           |
| <b>D</b> | <b>YBG102</b> |   | Grado di metallo duro con rivestimento in PVD S05-S15 per lavorazioni dalla finitura all'asportazione media di superleghe, acciaio inossidabile e alluminio. Ottima resistenza all'usura in una vasta gamma di applicazioni.                                                                                                                                              |
|          |               |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                           |
| <b>E</b> | <b>YB9320</b> |  | Grado di metallo duro P10 - P30/M10 - M25 con rivestimento in PVD multistrato per lavorazioni che spaziano dalla finitura all'asportazione media di acciaio inossidabile, superleghe e acciaio (scanalatura/fresatura). Resistenza all'usura ottimale grazie all'adesione migliore del rivestimento e alla maggiore resistenza termica in un ampio campo di applicazione. |
|          |               |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                           |
| <b>F</b> | <b>YBG205</b> |  | Grado di metallo duro P10 - P30/M20 - M40/S15 - S25 con rivestimento in PVD multistrato per lavorazioni che spaziano dalla finitura all'asportazione media di acciaio inossidabile, superleghe e acciaio (fresatura). Resistenza all'usura e resistenza termica ottimali in un ampio campo di applicazione.                                                               |
|          |               |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                           |
| <b>G</b> | <b>YBG202</b> |  | Grado di metallo duro con rivestimento in PVD P10-P30/M10-M25 per lavorazioni dalla finitura all'asportazione media di acciai inossidabili e acciaio (fresatura). Ottima resistenza all'usura in una vasta gamma di applicazioni.                                                                                                                                         |
|          |               |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                           |
| <b>H</b> | <b>YBG302</b> |  | Grado di metallo duro con rivestimento in PVD P15-P30/M25-M40 per lavorazioni dall'asportazione media fino alla sgrossatura di acciaio inossidabile e acciaio (fresatura). Ottima resistenza all'usura e tenacità.                                                                                                                                                        |
|          |               |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                           |

**Scanalature e troncatura**

| Grado        | ISO                    | Microstruttura                                                                    | Descrizione gradi                                                                                                                             |
|--------------|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YD101</b> | K05 - K20<br>N05 - N20 |  | Substrato in metallo duro non rivestito K05–K20/N05–N20 per lavorazioni dalla finitura all'asportazione media di alluminio e altri materiali. |
| <b>YD201</b> | K10 - K30<br>N10 - N30 |  | Substrato in metallo duro non rivestito K10–K30/N10–N30 per l'asportazione media di alluminio e altri materiali.                              |

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

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tecniche

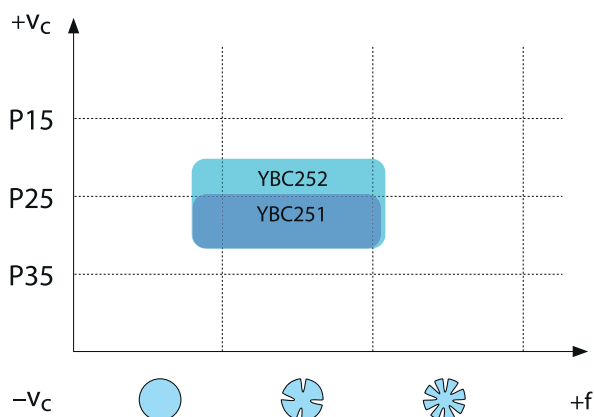
**E**

Indice

**A**

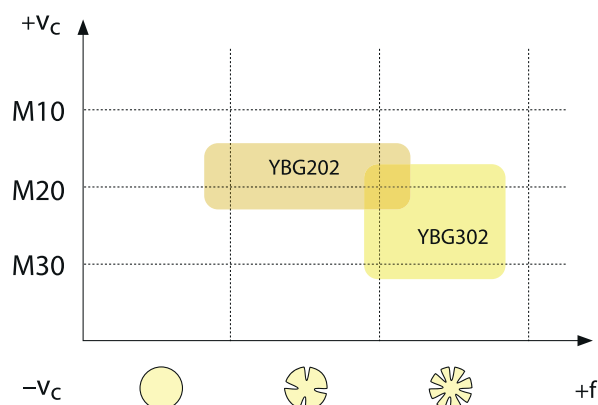
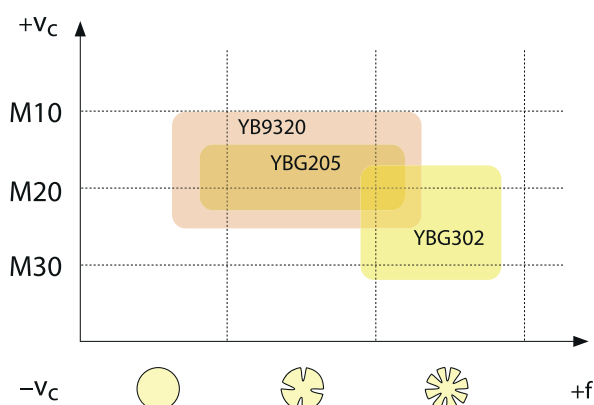
Tornitura

## Gradi di metallo duro con rivestimento in CVD per acciaio


**B**

Fresatura

## Gradi di metallo duro con rivestimento in PVD per acciaio inossidabile

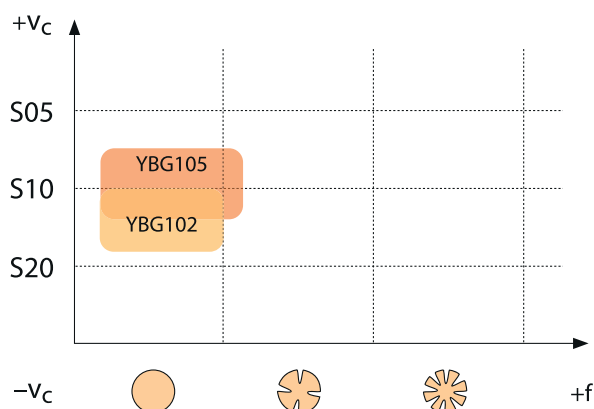

**C**

Foratura

**D**

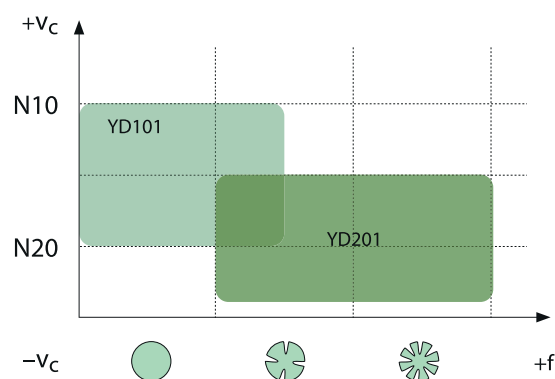
 Informazioni  
tecniche

## Gradi di metallo duro con rivestimento in PVD per superleghe


**E**

Indice

### Gradi di metallo duro per metalli non ferrosi



**A**

Tornitura

**B**

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**D**

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tecniche

**E**

Indice

## Campi di applicazione dei gradi – scanalature e gole

|          | ISO | HC <sup>1</sup> (CVD) | HC <sup>1</sup> (PVD)                | HT | HC <sup>2</sup> | Ceramic | HW             | CBN | PCD |
|----------|-----|-----------------------|--------------------------------------|----|-----------------|---------|----------------|-----|-----|
| <b>P</b> | P01 |                       |                                      |    |                 |         |                |     |     |
|          | P10 | YBC251<br>YBC252      |                                      |    |                 |         |                |     |     |
|          | P20 |                       |                                      |    |                 |         |                |     |     |
|          | P30 |                       |                                      |    |                 |         |                |     |     |
|          | P40 |                       |                                      |    |                 |         |                |     |     |
| <b>M</b> | M01 |                       |                                      |    |                 |         |                |     |     |
|          | M10 |                       |                                      |    |                 |         |                |     |     |
|          | M20 |                       | YBG202<br>YBG205<br>YB9320<br>YBG302 |    |                 |         |                |     |     |
|          | M30 |                       |                                      |    |                 |         |                |     |     |
|          | M40 |                       |                                      |    |                 |         |                |     |     |
| <b>K</b> | K01 |                       |                                      |    |                 |         |                |     |     |
|          | K10 |                       |                                      |    |                 |         |                |     |     |
|          | K20 |                       |                                      |    |                 |         |                |     |     |
|          | K30 |                       |                                      |    |                 |         |                |     |     |
| <b>N</b> | N01 |                       |                                      |    |                 |         |                |     |     |
|          | N10 |                       |                                      |    |                 |         | YD101<br>YD102 |     |     |
|          | N20 |                       |                                      |    |                 |         |                |     |     |
|          | N30 |                       |                                      |    |                 |         |                |     |     |
| <b>S</b> | S01 |                       |                                      |    |                 |         |                |     |     |
|          | S10 |                       | YBG102<br>YBG105                     |    |                 |         |                |     |     |
|          | S20 |                       |                                      |    |                 |         |                |     |     |
|          | S30 |                       |                                      |    |                 |         |                |     |     |
| <b>H</b> | H01 |                       |                                      |    |                 |         |                |     |     |
|          | H10 |                       |                                      |    |                 |         |                |     |     |
|          | H20 |                       |                                      |    |                 |         |                |     |     |
|          | H30 |                       |                                      |    |                 |         |                |     |     |

|          |                      |
|----------|----------------------|
| <b>P</b> | Acciaio              |
| <b>M</b> | Acciaio inossidabile |
| <b>K</b> | Ghisa                |

|          |                                    |
|----------|------------------------------------|
| <b>N</b> | Metalli non ferrosi                |
| <b>S</b> | Materiali a difficile asportazione |
| <b>H</b> | Materiali ad elevata durezza       |

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Metallo duro non rivestito



[illegible]

## Tornitura

## Fresatura

Foratura

## Informazioni tecniche

## Indice

**ZP G D 04 04 – M G**

1

2

3

4

5

6

7

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni tecniche

**E**

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| Applicazione |                         |
|--------------|-------------------------|
| Code         | Descrizione             |
| ZP           | Troncatura              |
| ZT           | Scanalatura e tornitura |
| ZR           | Inserti con raggio      |
|              |                         |
|              |                         |
|              |                         |
|              |                         |
|              |                         |
|              |                         |

1

| Dim. sede inserto [mm] |             |
|------------------------|-------------|
| Larghezza tagliente    |             |
| Code                   | Descrizione |
| B                      | 2,0         |
| E                      | 2,5         |
| F                      | 3,0         |
| G                      | 4,0         |
| H                      | 5,0         |
| K                      | 6,0         |
| L                      | 8,0         |

2

| Numero taglienti |             |
|------------------|-------------|
| Code             | Descrizione |
| S                | Singolo     |
| D                | Doppio      |
|                  |             |
|                  |             |
|                  |             |
|                  |             |
|                  |             |
|                  |             |

3

| Spessore dell'inserto S [mm]                                                        |     |
|-------------------------------------------------------------------------------------|-----|
|  |     |
| Code                                                                                | S   |
| 02                                                                                  | 2,0 |
| 025                                                                                 | 2,5 |
| 03                                                                                  | 3,0 |
| 04                                                                                  | 4,0 |
| 05                                                                                  | 5,0 |
| 06                                                                                  | 6,0 |
| 08                                                                                  | 8,0 |

4

| Raggio di punta r [mm]                                                              |     |
|-------------------------------------------------------------------------------------|-----|
|  |     |
| Code                                                                                | r   |
| 02                                                                                  | 0,2 |
| 03                                                                                  | 0,3 |
| 04                                                                                  | 0,4 |
| 08                                                                                  | 0,8 |

5

| Classe di tolleranza [mm] |             |
|---------------------------|-------------|
| Code                      | Descrizione |
| M                         | ±0,13       |
| E                         | ±0,025      |
|                           |             |
|                           |             |
|                           |             |

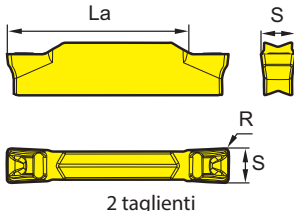
6

| Rompitruciolo |                        |
|---------------|------------------------|
| Code          | Descrizione            |
| G             | Rompitruciolo generico |
| F             | Rompitruciolo speciale |
| M             | Tagliente diritto      |

7

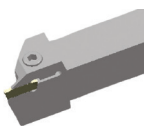
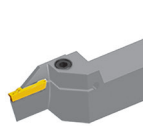
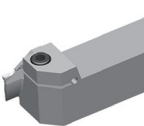
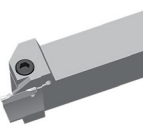
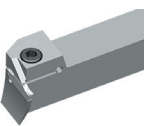
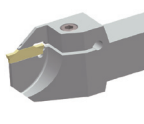
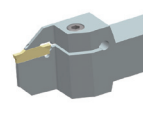
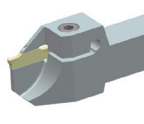
## Inserti per scanalatura e troncatura

-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

| ZT** Inserti scanalatura (bilaterale)                                             |              |     |    |     |           |       | HC <sup>1</sup> (CVD) |                                                                                   |                                                                                   | HC <sup>1</sup> (PVD) |        |                                                                                     | HW                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |  |
|-----------------------------------------------------------------------------------|--------------|-----|----|-----|-----------|-------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|--|
|  |              |     |    |     |           |       | P                     |  |  |                       |        |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |  |
|                                                                                   |              |     |    |     |           |       | M                     |                                                                                   |                                                                                   |                       |        |                                                                                     |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |  |
|                                                                                   |              |     |    |     |           |       | K                     |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |  |
|                                                                                   |              |     |    |     |           |       | N                     |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |       |  |
|                                                                                   |              |     |    |     |           |       | S                     |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |                                                                                     |       |  |
|                                                                                   |              |     |    |     |           |       | H                     |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |  |
| ISO                                                                               |              |     |    |     |           | R±0.1 | La max                | S                                                                                 | f                                                                                 | YBC252                | YBC251 |                                                                                     |                                                                                     | YBG105                                                                              | YBG102                                                                              | YBG320                                                                              | YBG205                                                                              | YBG202                                                                              | YBG302                                                                              | YD101                                                                               | YD201 |  |
|  | ZTBD02002-MM | 0,2 | 13 | 2   | 0,02-0,07 |       |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   | ●                                                                                   |                                                                                     | ○                                                                                   |                                                                                     |       |  |
|                                                                                   | ZTED02503-MM | 0,3 | 17 | 2,5 | 0,03-0,1  |       |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |       |  |
|                                                                                   | ZTFD0303-MM  | 0,3 | 17 | 3   | 0,04-0,13 |       |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |       |  |
|                                                                                   | ZTGD0404-MM  | 0,4 | 22 | 4   | 0,06-0,18 |       |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |       |  |
|                                                                                   | ZTHD0504-MM  | 0,4 | 22 | 5   | 0,08-0,23 |       |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |       |  |
|                                                                                   | ZTKD0608-MM  | 0,8 | 22 | 6   | 0,12-0,27 |       |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |                                                                                     |       |  |
|                                                                                   | ZTLD0808-MM  | 0,8 | 28 | 8   | 0,13-0,29 | ○     |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     | ○                                                                                   |                                                                                     |       |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

| Utensile                                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| QE*D*R/L                                                                            | QF*D*R/L-H                                                                          | QF*D*LL-H                                                                           | QF*D*RR-H                                                                           | QF*D*R/L-L                                                                           | *-QBDR/L                                                                              | C***-Q*DR/L                                                                           |
|  |  |  |  |  |  |  |
| A425                                                                                | A434                                                                                | A436                                                                                | A436                                                                                | A439                                                                                 | A444                                                                                  | A444                                                                                  |
| QE*D*R/L-DGC                                                                        | QE*D*R/L-DGSC                                                                       | QE*D*R/L-SC                                                                         |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |  |  |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A446                                                                                | A448                                                                                | A449                                                                                |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

Codice sistema > A398

Scelta gradi > A394

Informazioni tecniche > A501

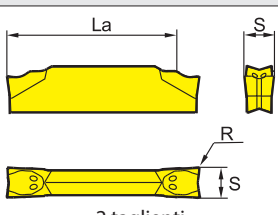
Dati di taglio > A456

A

Tornitura

## Inserti per scanalatura e troncatura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (bilaterale)                                                  |  |  |  |  |          | HC <sup>1</sup> (CVD) |   | HC <sup>1</sup> (PVD) |   |   |   | HW |   |
|-----------------------------------------------------------------------------------|--|--|--|--|----------|-----------------------|---|-----------------------|---|---|---|----|---|
|  |  |  |  |  | <b>P</b> | ●                     | ● | ●                     | ● | ● | ● |    |   |
|                                                                                   |  |  |  |  | <b>M</b> |                       |   | ●                     | ● | ● | ● |    |   |
|                                                                                   |  |  |  |  | <b>K</b> |                       |   |                       |   |   |   |    |   |
|                                                                                   |  |  |  |  | <b>N</b> |                       |   |                       |   |   |   | ●  | ● |
|                                                                                   |  |  |  |  | <b>S</b> |                       |   | ●                     | ● | ● | ● |    |   |
|                                                                                   |  |  |  |  | <b>H</b> |                       |   |                       |   |   |   |    |   |

B

Fresatura

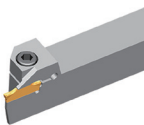
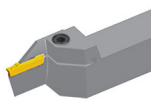
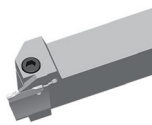
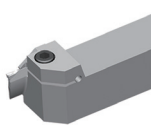
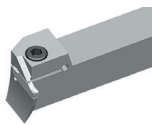
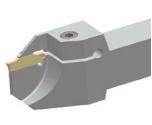
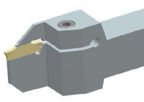
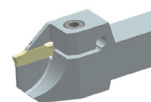
| ISO                                                                               |                     | R±0.1 | La max | S±0.10 | f         | YBC252 | YBC251 |  |  | YBG105 | YBG102 | YBG320 | YBG205 | YBG202 | YBG302 | YD101 | YD201 |
|-----------------------------------------------------------------------------------|---------------------|-------|--------|--------|-----------|--------|--------|--|--|--------|--------|--------|--------|--------|--------|-------|-------|
|  | <b>ZPED02502-MG</b> | 0,2   | 17     | 2,5    | 0,03-0,1  | ●      |        |  |  |        | ●      | ○      | ●      |        |        |       |       |
|                                                                                   | <b>ZPFD0302-MG</b>  | 0,2   | 17     | 3      | 0,04-0,13 | ●      | ●      |  |  |        | ●      | ○      | ●      |        |        |       |       |
|                                                                                   | <b>ZPGD0402-MG</b>  | 0,2   | 22     | 4      | 0,07-0,18 | ●      |        |  |  |        | ●      |        | ●      |        |        | ○     |       |
|                                                                                   | <b>ZPHD0503-MG</b>  | 0,3   | 22     | 5      | 0,1-0,24  |        |        |  |  |        |        |        | ○      | ●      |        |       |       |
|                                                                                   | <b>ZPKD0604-MG</b>  | 0,4   | 22     | 6      | 0,12-0,29 | ○      |        |  |  |        |        |        | ○      | ●      |        |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

C

Foratura

| Utensile                                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| QE*D*R/L                                                                            | QF*D*R/L-H                                                                          | QF*D*RR-H                                                                           | QF*D*LL-H                                                                           | QF*D*R/L-L                                                                           | C***-Q*DR/L                                                                           | QE*D*R/L-DGC                                                                          |
|  |  |  |  |  |  |  |
| A425                                                                                | A434                                                                                | A436                                                                                | A436                                                                                | A439                                                                                 | A444                                                                                  | A446                                                                                  |
| QE*D*R/L-DGSC                                                                       | QE*D*R/L-SC                                                                         |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |  |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A448                                                                                | A449                                                                                |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

D

Informazioni tecniche

E

Indice

Codice sistema > A398

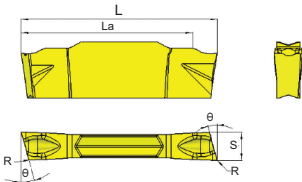
Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456

## Inserti per scanalatura e troncatura

-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

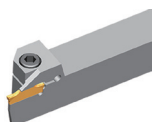
| ZT** Inserti scanalatura (bilaterale)                                                                               |                         |        |    |      |     |     |           | HC <sup>1</sup> (CVD) |                                                                                   |                                                                                   |  | HC <sup>1</sup> (PVD) |        |                                                                                     |                                                                                     | HW                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------|-------------------------|--------|----|------|-----|-----|-----------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--|-----------------------|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
| <div></div> <p>Versione destra</p> |                         |        |    |      |     |     |           | <b>P</b>              |  |  |  |                       |        |                                                                                     |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                                                     |                         |        |    |      |     |     |           | <b>M</b>              |                                                                                   |                                                                                   |  |                       |        |                                                                                     |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                                                     |                         |        |    |      |     |     |           | <b>K</b>              |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                                                     |                         |        |    |      |     |     |           | <b>N</b>              |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |
|                                                                                                                     |                         |        |    |      |     |     |           | <b>S</b>              |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |  |  |  |  |  |                                                                                     |  |
|                                                                                                                     |                         |        |    |      |     |     |           | <b>H</b>              |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| ISO                                                                                                                 |                         | La max | L  | S    | θ   | R   | f         | YBC252                | YBC251                                                                            |                                                                                   |  | YBG105                | YBG102 | YB9320                                                                              | YBG205                                                                              | YBG202                                                                              | YBG302                                                                              | YD101                                                                               | YD201                                                                               |                                                                                     |                                                                                     |  |
|                                    | <b>ZPED02502-MG-6L</b>  | 17     | 20 | 2,35 | 6°  | 0,2 | 0,03-0,08 |                       |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                                                     | <b>ZPED02502-MG-6R</b>  | 17     | 20 | 2,35 | 6°  | 0,2 | 0,03-0,08 |                       |                                                                                   |                                                                                   |  |                       |        |  |                                                                                     |                                                                                     |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                                                     | <b>ZPED02502-MG-15L</b> | 17     | 20 | 2,35 | 15° | 0,2 | 0,03-0,05 |                       |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                                                     | <b>ZPED02502-MG-15R</b> | 17     | 20 | 2,35 | 15° | 0,2 | 0,03-0,05 |                       |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                                                     | <b>ZPFD0302-MG-6L</b>   | 17     | 20 | 2,85 | 6°  | 0,2 | 0,04-0,1  |                       |                                                                                   |                                                                                   |  |                       |        |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                                                     | <b>ZPFD0302-MG-6R</b>   | 17     | 20 | 2,85 | 6°  | 0,2 | 0,04-0,1  |                       |                                                                                   |                                                                                   |  |                       |        |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                                                     | <b>ZPFD0302-MG-15L</b>  | 17     | 20 | 2,85 | 15° | 0,2 | 0,04-0,08 |                       |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                                                     | <b>ZPFD0302-MG-15R</b>  | 17     | 20 | 2,85 | 15° | 0,3 | 0,04-0,08 |                       |                                                                                   |                                                                                   |  |                       |        |  |                                                                                     |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

Utensile

QE\*D\*R/L



A425

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni  
tecniche

**E**

Indice

Codice sistema > A398

Scelta gradi > A394

Informazioni tecniche > A501

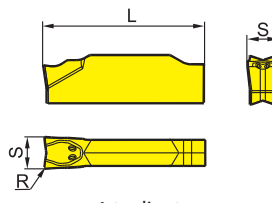
Dati di taglio > A456

A

Tornitura

## Inserti per scanalatura e troncatura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (monolaterale)                                                                                  |                |     |     |           | HC <sup>1</sup> (CVD) |        |   |        | HC <sup>1</sup> (PVD) |  |  |  | HW     |        |        |        |        |        |       |       |
|---------------------------------------------------------------------------------------------------------------------|----------------|-----|-----|-----------|-----------------------|--------|---|--------|-----------------------|--|--|--|--------|--------|--------|--------|--------|--------|-------|-------|
| <div></div> <div>1 tagliente</div> |                |     |     |           | P                     |        |   |        |                       |  |  |  |        |        |        |        |        |        |       |       |
|                                                                                                                     |                |     |     |           | M                     |        |   |        |                       |  |  |  |        |        |        |        |        |        |       |       |
|                                                                                                                     |                |     |     |           | K                     |        |   |        |                       |  |  |  |        |        |        |        |        |        |       |       |
|                                                                                                                     |                |     |     |           | N                     |        |   |        |                       |  |  |  |        |        |        |        |        |        |       |       |
|                                                                                                                     |                |     |     |           | S                     |        |   |        |                       |  |  |  |        |        |        |        |        |        |       |       |
|                                                                                                                     |                |     |     |           | H                     |        |   |        |                       |  |  |  |        |        |        |        |        |        |       |       |
| ISO                                                                                                                 |                |     |     |           | R±0.1                 | S±0.10 | f | YBC252 | YBC251                |  |  |  | YBG105 | YBG102 | YBG320 | YBG205 | YBG202 | YBG302 | YD101 | YD201 |
|                                    | ZPES02502-MG   | 0,2 | 2,5 | 0,03-0,1  |                       |        |   |        |                       |  |  |  |        |        | ○      | ○      | ●      |        |       |       |
|                                                                                                                     | ZPFS0302-MG    | 0,2 | 3   | 0,04-0,13 |                       |        |   | ●      |                       |  |  |  |        |        | ●      |        | ●      |        |       |       |
|                                                                                                                     | ZPGS0402-MG    | 0,2 | 4   | 0,07-0,18 |                       |        |   | ○      |                       |  |  |  |        |        |        |        | ○      | ●      |       | ○     |
|                                                                                                                     | ZPGS0402-MG-25 | 0,2 | 4   | 0,07-0,18 |                       |        |   |        |                       |  |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                                                     | ZPHS0503-MG    | 0,3 | 5   | 0,1-0,24  |                       |        |   |        |                       |  |  |  |        |        |        |        | ○      | ●      |       |       |
|                                                                                                                     | ZPHS0503-MG-25 | 0,3 | 5   | 0,1-0,24  |                       |        |   |        |                       |  |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                                                     | ZPKS0604-MG    | 0,4 | 6   | 0,12-0,29 |                       |        |   |        |                       |  |  |  |        |        |        |        | ○      | ●      |       |       |
|                                                                                                                     | ZPKS0604-MG-25 | 0,4 | 6   | 0,12-0,29 |                       |        |   |        |                       |  |  |  |        |        | ●      |        |        |        |       |       |

● In magazzino ○ Su richiesta

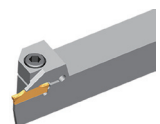
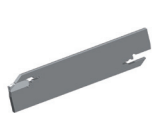
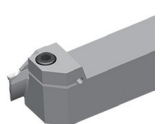
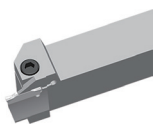
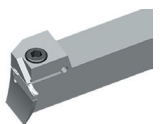
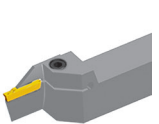
Inserti a tagliente unico esclusivamente per l'impiego su lame per gole

HC<sup>1</sup> Carburo cementato rivestito

HW Carburo cementato non rivestito

C

Foratura

| Utensile                                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| QE*S*R/L                                                                            | QZ**+QE**                                                                           | QF*S*LL-H                                                                           | QF*S*RR-H                                                                           | QF*S*R/L-L                                                                           | QF*S*R/L-H                                                                            |
|  |  |  |  |  |  |
| A427                                                                                | A432                                                                                | A438                                                                                | A438                                                                                | A441                                                                                 | A442                                                                                  |

D

Informazioni tecniche

E

Indice

Codice sistema > A398

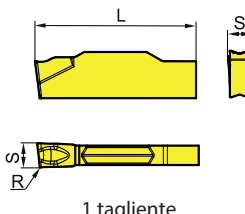
Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456

## Inserti per scanalatura e troncatura

-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (monolaterale)                                                                                  |                        |       |      |        |    |           | HC <sup>1</sup> (CVD) |                                                                                   |                                                                                    |  | HC <sup>1</sup> (PVD) |        |        |                                                                                     | HW                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|---------------------------------------------------------------------------------------------------------------------|------------------------|-------|------|--------|----|-----------|-----------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|-----------------------|--------|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <div></div> <div>1 tagliente</div> |                        |       |      |        |    |           | <b>P</b>              |  |  |  |                       |        |        |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |
|                                                                                                                     |                        |       |      |        |    |           | <b>M</b>              |                                                                                   |                                                                                    |  |                       |        |        |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |
|                                                                                                                     |                        |       |      |        |    |           | <b>K</b>              |                                                                                   |                                                                                    |  |                       |        |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                                                                                                                     |                        |       |      |        |    |           | <b>N</b>              |                                                                                   |                                                                                    |  |                       |        |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |
|                                                                                                                     |                        |       |      |        |    |           | <b>S</b>              |                                                                                   |                                                                                    |  |                       |        |        |                                                                                     |  |  |  |  |  |                                                                                     |
|                                                                                                                     |                        |       |      |        |    |           | <b>H</b>              |                                                                                   |                                                                                    |  |                       |        |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| ISO                                                                                                                 |                        | R±0.1 | L    | S±0.10 | θ  | f         | YBC252                | YBC251                                                                            |                                                                                    |  | YBG105                | YBG102 | YB9320 | YBG205                                                                              | YBG202                                                                              | YBG302                                                                              | YD101                                                                               | YD201                                                                               |                                                                                     |                                                                                     |
|                                    | <b>ZPES02502-MG-6L</b> | 0,2   | 19,9 | 2,5    | 6° | 0,03-0,08 |                       |                                                                                   |                                                                                    |  |                       |        | ●      |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                                                                                                                     | <b>ZPES02502-MG-6R</b> | 0,2   | 19,9 | 2,5    | 6° | 0,03-0,08 |                       |                                                                                   |                                                                                    |  |                       |        | ●      |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                                                                                                                     | <b>ZPFS0302-MG-6L</b>  | 0,2   | 19,9 | 3      | 6° | 0,04-0,1  |                       |                                                                                   |                                                                                    |  |                       |        | ●      |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                                                                                                                     | <b>ZPFS0302-MG-6R</b>  | 0,2   | 19,9 | 3      | 6° | 0,04-0,1  |                       |                                                                                   |                                                                                    |  |                       |        | ●      |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                                                                                                                     |                        |       |      |        |    |           |                       |                                                                                   |                                                                                    |  |                       |        |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

● In magazzino ○ Su richiesta

Inserti a tagliente unico esclusivamente per l'impiego su lame per gole

HC<sup>1</sup> Carburo cementato rivestito

HW Carburo cementato non rivestito

Utensile

QZ\*\*+QE\*\*



A432

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni  
tecniche

**E**

Indice

Codice sistema > A398

Scelta gradi > A394

Informazioni tecniche > A501

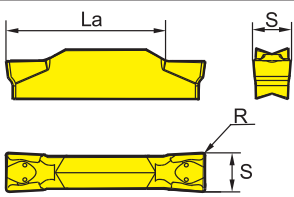
Dati di taglio > A456

**A**

Tornitura

## Inserti per scanalatura e troncatura

- Buone condizioni di lavorazione
- ⊗ Condizioni di lavorazione normali
- ⊗ Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (bilaterale)                                                  |  |  |  |  |          | HC <sup>1</sup> (CVD)               |                                     | HC <sup>1</sup> (PVD) |  |                                       |                                       |                                       |                                       | HW                                   |                                      |
|-----------------------------------------------------------------------------------|--|--|--|--|----------|-------------------------------------|-------------------------------------|-----------------------|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--------------------------------------|--------------------------------------|
|  |  |  |  |  | <b>P</b> | <span style="color: blue;">⊗</span> | <span style="color: blue;">⊗</span> |                       |  | <span style="color: blue;">⊗</span>   | <span style="color: blue;">⊗</span>   | <span style="color: blue;">⊗</span>   | <span style="color: blue;">⊗</span>   |                                      |                                      |
|                                                                                   |  |  |  |  | <b>M</b> |                                     |                                     |                       |  | <span style="color: blue;">⊗</span>   | <span style="color: blue;">⊗</span>   | <span style="color: blue;">⊗</span>   | <span style="color: blue;">⊗</span>   |                                      |                                      |
|                                                                                   |  |  |  |  | <b>K</b> |                                     |                                     |                       |  | <span style="color: blue;">⊗</span>   | <span style="color: blue;">⊗</span>   | <span style="color: blue;">⊗</span>   | <span style="color: blue;">⊗</span>   |                                      |                                      |
|                                                                                   |  |  |  |  | <b>N</b> |                                     |                                     |                       |  |                                       |                                       |                                       |                                       | <span style="color: green;">●</span> | <span style="color: green;">⊗</span> |
|                                                                                   |  |  |  |  | <b>S</b> |                                     |                                     |                       |  | <span style="color: orange;">●</span> | <span style="color: orange;">●</span> | <span style="color: orange;">⊗</span> | <span style="color: orange;">⊗</span> |                                      |                                      |
|                                                                                   |  |  |  |  | <b>H</b> |                                     |                                     |                       |  |                                       |                                       |                                       |                                       |                                      |                                      |

**B**

Fresatura

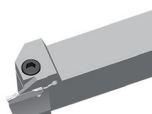
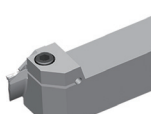
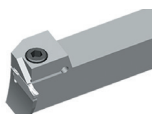
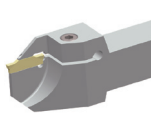
| ISO                                                                               |                     | R±0.1 | La max | S±0.10 | f         | YBC252 | YBC251 |  |  |  | YBG105 | YBG102 | YBG320 | YBG205 | YBG202 | YBG302 | YD101 | YD201 |
|-----------------------------------------------------------------------------------|---------------------|-------|--------|--------|-----------|--------|--------|--|--|--|--------|--------|--------|--------|--------|--------|-------|-------|
|  | <b>ZTED02503-MG</b> |       | 17     | 2,5    | 0,03-0,11 |        |        |  |  |  |        |        |        |        | ○      | ●      |       |       |
|                                                                                   | <b>ZTFD0303-MG</b>  |       | 17     | 3      | 0,04-0,14 |        |        |  |  |  |        | ○      |        | ●      | ●      | ●      |       |       |
|                                                                                   | <b>ZTGD0402-MG</b>  |       | 22     | 4      | 0,07-0,2  |        |        |  |  |  |        |        |        |        |        |        |       |       |
|                                                                                   | <b>ZTGD0404-MG</b>  |       | 22     | 4      | 0,07-0,2  |        | ●      |  |  |  |        |        |        | ●      | ○      | ●      |       | ●     |
|                                                                                   | <b>ZTHD0504-MG</b>  |       | 22     | 5      | 0,10-0,25 |        |        |  |  |  |        |        |        | ●      | ○      | ●      |       |       |
|                                                                                   | <b>ZTKD0604-MG</b>  |       | 22     | 6      | 0,13-0,30 |        |        |  |  |  |        |        | ○      | ●      |        |        |       |       |
|                                                                                   | <b>ZTKD0608-MG</b>  |       | 22     | 6      | 0,13-0,30 |        |        |  |  |  |        |        | ○      | ●      | ○      | ●      |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

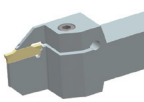
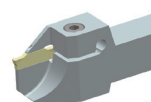
**C**

Foratura

| Utensile                                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| QE*D*R/L                                                                            | QF*D*R/L-H                                                                          | QF*D*RR-H                                                                           | QF*D*LL-H                                                                           | QF*D*R/L-L                                                                           | C***-Q*DR/L                                                                           | QE*D*R/L-DGC                                                                          |
|  |  |  |  |  |  |  |
| A425                                                                                | A434                                                                                | A436                                                                                | A436                                                                                | A439                                                                                 | A444                                                                                  | A446                                                                                  |

**D**

Informazioni tecniche

| QE*D*R/L-DGSC                                                                       | QE*D*R/L-SC                                                                         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |
| A448                                                                                | A449                                                                                |

**E**

Indice

Codice sistema > A398

Scelta gradi > A394

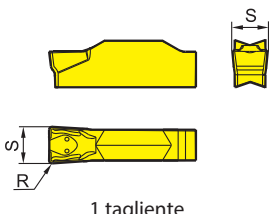
Informazioni tecniche > A501

Dati di taglio > A456



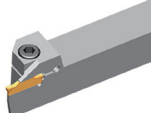
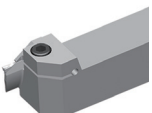
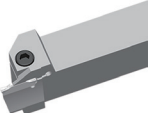
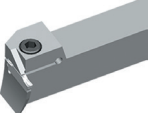
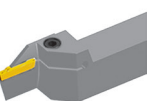
## Inserti per scanalatura e troncatura

-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (monolaterale)                                                |                    |  |  |  | HC <sup>1</sup> (CVD) |                                                                                   | HC <sup>1</sup> (PVD)                                                              |        |        |  | HW                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |       |       |
|-----------------------------------------------------------------------------------|--------------------|--|--|--|-----------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------|--------|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|--------|-------|-------|
|  |                    |  |  |  | <b>P</b>              |  |  |        |        |  |  |  |  |  |                                                                                     |                                                                                     |        |        |       |       |
|                                                                                   |                    |  |  |  | <b>M</b>              |                                                                                   |                                                                                    |        |        |  |  |  |  |  |                                                                                     |                                                                                     |        |        |       |       |
|                                                                                   |                    |  |  |  | <b>K</b>              |                                                                                   |                                                                                    |        |        |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |       |       |
|                                                                                   |                    |  |  |  | <b>N</b>              |                                                                                   |                                                                                    |        |        |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |        |        |       |       |
|                                                                                   |                    |  |  |  | <b>S</b>              |                                                                                   |                                                                                    |        |        |  |  |  |  |  |  |                                                                                     |        |        |       |       |
|                                                                                   |                    |  |  |  | <b>H</b>              |                                                                                   |                                                                                    |        |        |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |       |       |
| ISO                                                                               |                    |  |  |  | R±0.1                 | S±0.10                                                                            | f                                                                                  | YBC252 | YBC251 |  |                                                                                     |                                                                                     | YBG105                                                                              | YBG102                                                                              | YB9320                                                                              | YBG205                                                                              | YBG202 | YBG302 | YD101 | YD201 |
|  | <b>ZTHS0504-MG</b> |  |  |  | 0,4                   | 5                                                                                 | 0,10-0,25                                                                          |        |        |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   | ○                                                                                   | ●      |        |       |       |
|                                                                                   |                    |  |  |  |                       |                                                                                   |                                                                                    |        |        |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |       |       |
|                                                                                   |                    |  |  |  |                       |                                                                                   |                                                                                    |        |        |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |       |       |
|                                                                                   |                    |  |  |  |                       |                                                                                   |                                                                                    |        |        |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |       |       |
|  | <b>ZTKS0608-MG</b> |  |  |  | 0,8                   | 6                                                                                 | 0,13-0,30                                                                          |        |        |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   | ●      |        |       |       |
|                                                                                   |                    |  |  |  |                       |                                                                                   |                                                                                    |        |        |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |       |       |
|                                                                                   |                    |  |  |  |                       |                                                                                   |                                                                                    |        |        |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |       |       |
|                                                                                   |                    |  |  |  |                       |                                                                                   |                                                                                    |        |        |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |        |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

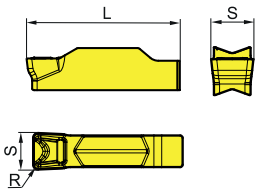
| Utensile                                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| QE*S*/L                                                                             | QZ**+QE**                                                                           | QF*S*LL-H                                                                           | QF*S*RR-H                                                                           | QF*S*/L-L                                                                            | QF*S*/L-H                                                                             |
|  |  |  |  |  |  |
| A427                                                                                | A431                                                                                | A438                                                                                | A438                                                                                | A441                                                                                 | A442                                                                                  |

A

Tornitura

## Inserti per scanalatura e troncatura

- Buone condizioni di lavorazione
- ⊗ Condizioni di lavorazione normali
- ⊗ Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (monolaterale)                                                |  |  |  |  |  | HC <sup>1</sup> (CVD) |                                                                         | HC <sup>1</sup> (PVD) |                                                                                                                                                         |  |  | HW                                                                        |  |
|-----------------------------------------------------------------------------------|--|--|--|--|--|-----------------------|-------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------|--|
|  |  |  |  |  |  | <b>P</b>              | <span style="color: blue;">⊗</span> <span style="color: blue;">⊗</span> |                       | <span style="color: blue;">⊗</span> <span style="color: blue;">⊗</span> <span style="color: blue;">⊗</span> <span style="color: blue;">⊗</span>         |  |  |                                                                           |  |
|                                                                                   |  |  |  |  |  | <b>M</b>              |                                                                         |                       | <span style="color: blue;">⊗</span> <span style="color: blue;">⊗</span> <span style="color: blue;">⊗</span> <span style="color: blue;">⊗</span>         |  |  |                                                                           |  |
|                                                                                   |  |  |  |  |  | <b>K</b>              |                                                                         |                       |                                                                                                                                                         |  |  |                                                                           |  |
|                                                                                   |  |  |  |  |  | <b>N</b>              |                                                                         |                       |                                                                                                                                                         |  |  | <span style="color: green;">⊗</span> <span style="color: green;">⊗</span> |  |
|                                                                                   |  |  |  |  |  | <b>S</b>              |                                                                         |                       | <span style="color: orange;">●</span> <span style="color: orange;">●</span> <span style="color: orange;">⊗</span> <span style="color: orange;">⊗</span> |  |  |                                                                           |  |
|                                                                                   |  |  |  |  |  | <b>H</b>              |                                                                         |                       |                                                                                                                                                         |  |  |                                                                           |  |

B

Fresatura

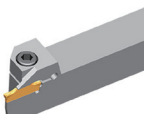
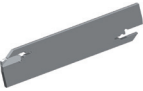
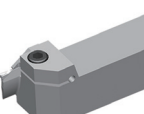
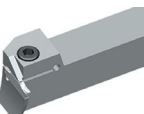
| ISO                                                                               |                       | R±0.1 | L    | S±0.10 | f         | YBC252 | YBC251 |  |  | YBG105 | YBG102 | YBG320 | YBG205 | YBG202 | YBG302 | YD101 | YD201 |
|-----------------------------------------------------------------------------------|-----------------------|-------|------|--------|-----------|--------|--------|--|--|--------|--------|--------|--------|--------|--------|-------|-------|
|  | <b>ZTES02503-MM</b>   | 0,3   | 19,9 | 2,5    | 0,03-0,1  |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                   | <b>ZTFS0303-MM</b>    | 0,3   | 19,9 | 3      | 0,04-0,13 |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                   | <b>ZTGS0404-MM-25</b> | 0,4   | 24,6 | 4      | 0,06-0,18 |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                   | <b>ZTHS0504-MM-25</b> | 0,4   | 24,6 | 5      | 0,08-0,23 |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                   | <b>ZTKS0608-MM-25</b> | 0,8   | 24,6 | 6      | 0,12-0,27 |        |        |  |  |        |        | ●      |        |        |        |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

C

Foratura

| Utensile                                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| QE*S*R/L                                                                            | QZ**+QE**                                                                           | QF*S*LL-H                                                                           | QF*S*RR-H                                                                           | QF*S*R/L-L                                                                           | QF*S*R/L-H                                                                            |
|  |  |  |  |  |  |
| A427                                                                                | A432                                                                                | A438                                                                                | A438                                                                                | A441                                                                                 | A442                                                                                  |

D

Informazioni tecniche

E

Indice

Codice sistema > A398

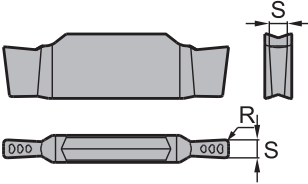
Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456

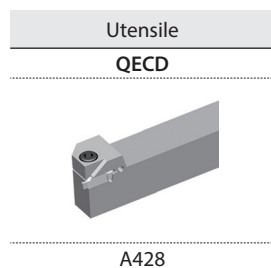
## Inserti per scanalatura e troncatura

-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (bilaterale)                                                    |               |        |         |           |           | HC <sup>1</sup> (CVD) |                                                                                   |                                                                                   | HC <sup>1</sup> (PVD) |        |                                                                                     |                                                                                     | HW                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|-------------------------------------------------------------------------------------|---------------|--------|---------|-----------|-----------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|    |               |        |         |           |           | <b>P</b>              |  |  |                       |        |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                     |               |        |         |           |           | <b>M</b>              |                                                                                   |                                                                                   |                       |        |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                     |               |        |         |           |           | <b>K</b>              |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                     |               |        |         |           |           | <b>N</b>              |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |
|                                                                                     |               |        |         |           |           | <b>S</b>              |                                                                                   |                                                                                   |                       |        |                                                                                     |  |  |  |  |  |                                                                                     |  |
|                                                                                     |               |        |         |           |           | <b>H</b>              |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| ISO                                                                                 |               | La max | S±0.025 | R±0.05    | f         | YBC252                | YBC251                                                                            |                                                                                   |                       | YBG105 | YBG102                                                                              | YB9320                                                                              | YBG205                                                                              | YBG202                                                                              | YBG302                                                                              | YD101                                                                               | YD201                                                                               |  |
|  | ZTCD01002-EG  | 2,6    | 1       | 0,2       | 0,02-0,04 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD011502-EG | 2,6    | 1,15    | 0,2       | 0,02-0,04 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD01202-EG  | 2,6    | 1,2     | 0,2       | 0,02-0,04 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD013802-EG | 2,6    | 1,38    | 0,2       | 0,02-0,04 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD01402-EG  | 2,6    | 1,4     | 0,2       | 0,02-0,04 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD01500-EG  | 2,6    | 1,5     | 0         | 0,02-0,04 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD01502-EG  | 2,6    | 1,5     | 0,2       | 0,02-0,04 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD01503-EG  | 2,6    | 1,5     | 0,3       | 0,02-0,04 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD015503-EG | 2,6    | 1,55    | 0,3       | 0,02-0,04 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD01602-EG  | 2,6    | 1,6     | 0,2       | 0,02-0,04 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD01702-EG  | 3,4    | 1,7     | 0,2       | 0,02-0,08 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD017503-EG | 3,4    | 1,75    | 0,3       | 0,02-0,08 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD017602-EG | 3,4    | 1,76    | 0,2       | 0,02-0,08 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD01802-EG  | 3,4    | 1,8     | 0,2       | 0,02-0,08 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD018502-EG | 3,4    | 1,85    | 0,2       | 0,02-0,08 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD02000-EG  | 3,4    | 2       | 0         | 0,02-0,08 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD02002-EG  | 3,4    | 2       | 0,2       | 0,02-0,08 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD020503-EG | 3,4    | 2,05    | 0,3       | 0,02-0,08 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD021502-EG | 3,4    | 2,15    | 0,2       | 0,02-0,08 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
|                                                                                     | ZTCD02302-EG  | 3,4    | 2,3     | 0,2       | 0,03-0,11 |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |  |
| ZTCD02303-EG                                                                        | 3,4           | 2,3    | 0,3     | 0,03-0,11 |           |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |
| ZTCD02402-EG                                                                        | 3,4           | 2,4    | 0,2     | 0,03-0,11 |           |                       |                                                                                   |                                                                                   |                       |        |                                                                                     |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito



A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni  
tecniche

E

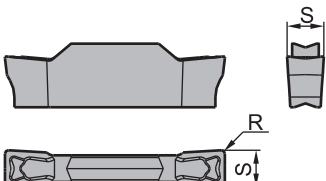
Indice

A

Tornitura

## Inserti per scanalatura e troncatura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (bilaterale)                                                  |          |    |  |  | HC <sup>1</sup> (CVD) |  | HC <sup>1</sup> (PVD) |  |  |  |    | HW |  |
|-----------------------------------------------------------------------------------|----------|----|--|--|-----------------------|--|-----------------------|--|--|--|----|----|--|
|  | <b>P</b> | ●● |  |  |                       |  | ●●●●                  |  |  |  |    |    |  |
|                                                                                   | <b>M</b> |    |  |  |                       |  | ●●●●                  |  |  |  |    |    |  |
|                                                                                   | <b>K</b> |    |  |  |                       |  |                       |  |  |  |    |    |  |
|                                                                                   | <b>N</b> |    |  |  |                       |  |                       |  |  |  | ●● |    |  |
|                                                                                   | <b>S</b> |    |  |  |                       |  | ●●●●                  |  |  |  |    |    |  |
|                                                                                   | <b>H</b> |    |  |  |                       |  |                       |  |  |  |    |    |  |

B

Fresatura

| ISO            | La max | S±0.025 | R±0.05 | f         | YBC252 | YBC251 |  |  |  | YBG105 | YBG102 | YBG320 | YBG205 | YBG202 | YBG302 | YD101 | YD201 |
|----------------|--------|---------|--------|-----------|--------|--------|--|--|--|--------|--------|--------|--------|--------|--------|-------|-------|
| ZTED02502-EG   | 17     | 2,5     | 0,2    | 0,03-0,11 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTED026502-EG  | 17     | 2,65    | 0,2    | 0,03-0,11 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTED02702-EG   | 17     | 2,7     | 0,2    | 0,03-0,11 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTED02703-EG   | 17     | 2,7     | 0,3    | 0,03-0,11 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTED02802-EG   | 17     | 2,8     | 0,2    | 0,04-0,13 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTED02803-EG   | 17     | 2,8     | 0,3    | 0,04-0,13 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTED02804-EG   | 17     | 2,8     | 0,4    | 0,04-0,13 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTED02903-EG   | 17     | 2,9     | 0,3    | 0,04-0,13 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTFD03001-EG   | 17     | 3       | 0,1    | 0,04-0,13 |        |        |  |  |  |        |        |        |        | ○      |        |       |       |
| ZTFD03002-EG   | 17     | 3       | 0,2    | 0,04-0,13 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTFD03003-EG   | 17     | 3       | 0,3    | 0,04-0,13 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTFD03203-EG   | 17     | 3,2     | 0,3    | 0,04-0,13 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTFD0325024-EG | 17     | 3,25    | 2,4    | 0,04-0,13 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTFD03302-EG   | 17     | 3,3     | 0,2    | 0,04-0,13 |        |        |  |  |  |        |        |        |        | ○      | ○      |       |       |
| ZTFD03303-EG   | 17     | 3,3     | 0,3    | 0,04-0,13 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTFD03403-EG   | 17     | 3,4     | 0,3    | 0,04-0,13 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTFD035-EG     | 17     | 3,5     | 0      | 0,04-0,13 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTGD039602-EG  | 22     | 3,96    | 0,2    | 0,07-0,18 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTGD04002-EG   | 22     | 4       | 0,2    | 0,07-0,18 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTGD04003-EG   | 22     | 4       | 0,3    | 0,07-0,18 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTGD04004-EG   | 22     | 4       | 0,4    | 0,07-0,18 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTGD04008-EG   | 22     | 4       | 0,8    | 0,07-0,18 |        |        |  |  |  |        |        |        |        | ○      |        |       |       |
| ZTGD04503-EG   | 22     | 4,5     | 0,3    | 0,07-0,18 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTGD04505-EG   | 22     | 4,5     | 0,5    | 0,07-0,18 |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTGD04805-EG   | 22     | 4,8     | 0,5    | 0,1-0,24  |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTHD05003-EG   | 22     | 5       | 0,3    | 0,1-0,24  |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTHD05004-EG   | 22     | 5       | 0,4    | 0,1-0,24  |        |        |  |  |  |        |        |        |        | ○      |        |       |       |
| ZTHD05008-EG   | 22     | 5       | 0,8    | 0,1-0,24  |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTHD05012-EG   | 22     | 5       | 0,12   | 0,1-0,24  |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTHD05202-EG   | 22     | 5,2     | 0,2    | 0,1-0,24  |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTHD052503-EG  | 22     | 5,25    | 0,3    | 0,1-0,24  |        |        |  |  |  |        |        |        |        |        | ○      |       |       |
| ZTHD05508-EG   | 22     | 5,5     | 0,8    | 0,1-0,24  |        |        |  |  |  |        |        |        |        |        | ○      |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

Indice

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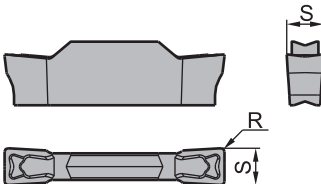
Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456

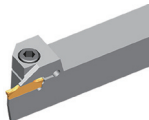
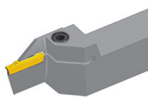
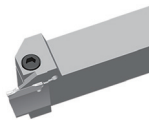
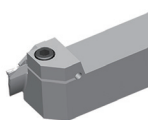
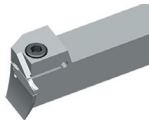
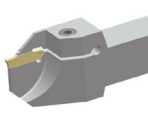
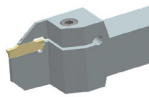
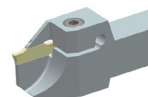
## Inserti per scanalatura e troncatura

-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (bilaterale)                                                  |              |  |  |  |        | HC <sup>1</sup> (CVD) |                                                                                   |                                                                                   |           | HC <sup>1</sup> (PVD) |  |                                                                                     |                                                                                     | HW                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |       |
|-----------------------------------------------------------------------------------|--------------|--|--|--|--------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------|-----------------------|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|-------|
|  |              |  |  |  |        | P                     |  |  |           |                       |  |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |       |       |
|                                                                                   |              |  |  |  |        | M                     |                                                                                   |                                                                                   |           |                       |  |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |       |       |
|                                                                                   |              |  |  |  |        | K                     |                                                                                   |                                                                                   |           |                       |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |       |
|                                                                                   |              |  |  |  |        | N                     |                                                                                   |                                                                                   |           |                       |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |       |       |
|                                                                                   |              |  |  |  |        | S                     |                                                                                   |                                                                                   |           |                       |  |                                                                                     |                                                                                     |  |  |  |  |  |       |       |
|                                                                                   |              |  |  |  |        | H                     |                                                                                   |                                                                                   |           |                       |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |       |
| ISO                                                                               |              |  |  |  | La max | S±0.025               | R±0.05                                                                            | f                                                                                 | YBC252    | YBC251                |  |                                                                                     | YBG105                                                                              | YBG102                                                                              | YBG320                                                                              | YBG205                                                                              | YBG202                                                                              | YBG302                                                                              | YD101 | YD201 |
|  | ZTKD06004-EG |  |  |  |        | 22                    | 6                                                                                 | 0,4                                                                               | 0,12-0,29 |                       |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |       |       |
|                                                                                   | ZTKD06504-EG |  |  |  |        | 22                    | 6,5                                                                               | 0,4                                                                               | 0,12-0,29 |                       |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |       |       |
|                                                                                   |              |  |  |  |        |                       |                                                                                   |                                                                                   |           |                       |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

| Utensile                                                                            |                                                                                     |                                                                                    |                                                                                    |                                                                                     |                                                                                      |                                                                                      |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| QE*D*R/L                                                                            | QF*D*R/L-H                                                                          | QF*D*RR-H                                                                          | QF*D*LL-H                                                                          | QF*D*R/L-L                                                                          | C***-Q*DR/L                                                                          | QE*D*R/L-DGC                                                                         |
|   |   |  |  |  |  |  |
| A425                                                                                | A434                                                                                | A436                                                                               | A436                                                                               | A439                                                                                | A444                                                                                 | A446                                                                                 |
| QE*D*R/L-DGSC                                                                       | QE*D*R/L-SC                                                                         |                                                                                    |                                                                                    |                                                                                     |                                                                                      |                                                                                      |
|  |  |                                                                                    |                                                                                    |                                                                                     |                                                                                      |                                                                                      |
| A448                                                                                | A449                                                                                |                                                                                    |                                                                                    |                                                                                     |                                                                                      |                                                                                      |

Codice sistema > A398

Scelta gradi > A394

Informazioni tecniche > A501

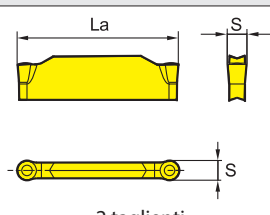
Dati di taglio > A456

A

Tornitura

## Inserti per scanalatura e troncatura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (bilaterale)                                                  |  |  |          | HC <sup>1</sup> (CVD) |   | HC <sup>1</sup> (PVD) |   | HW |   |
|-----------------------------------------------------------------------------------|--|--|----------|-----------------------|---|-----------------------|---|----|---|
|  |  |  | <b>P</b> | ●                     | ● |                       |   | ●  | ● |
|                                                                                   |  |  | <b>M</b> |                       |   | ●                     | ● | ●  | ● |
|                                                                                   |  |  | <b>K</b> |                       |   | ●                     | ● | ●  | ● |
|                                                                                   |  |  | <b>N</b> |                       |   |                       |   | ●  | ● |
|                                                                                   |  |  | <b>S</b> |                       |   | ●                     | ● | ●  | ● |
|                                                                                   |  |  | <b>H</b> |                       |   |                       |   |    |   |

B

Fresatura

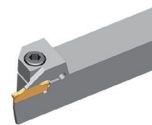
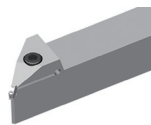
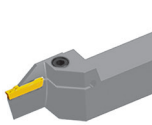
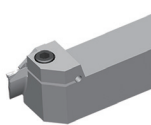
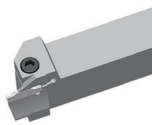
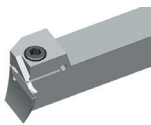
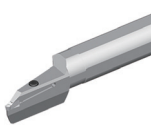
| ISO                                                                               |                   |  | La max | S±0.10 | f         | YBC252 | YBC251 |  |  | YBG105 | YBG102 | YBG320 | YBG205 | YBG202 | YBG302 | YD101 | YD201 |
|-----------------------------------------------------------------------------------|-------------------|--|--------|--------|-----------|--------|--------|--|--|--------|--------|--------|--------|--------|--------|-------|-------|
|  | <b>ZRED025-MG</b> |  | 17,5   | 2,5    | 0,03-0,11 |        |        |  |  |        |        |        |        | ○      | ●      |       |       |
|                                                                                   | <b>ZRFD03-MG</b>  |  | 17     | 3      | 0,04-0,14 |        |        |  |  |        |        | ●      |        |        | ●      |       |       |
|                                                                                   | <b>ZRGD04-MG</b>  |  | 21     | 4      | 0,07-0,2  |        | ○      |  |  |        |        |        | ●      | ○      | ●      |       |       |
|                                                                                   | <b>ZRHD05-MG</b>  |  | 20     | 5      | 0,1-0,24  |        |        |  |  |        |        |        |        | ○      | ●      |       | ○     |
|                                                                                   | <b>ZRKD06-MG</b>  |  | 19     | 6      | 0,12-0,29 |        |        |  |  |        |        |        |        | ○      | ●      |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

C

Foratura

| Utensile                                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| QE*D*R/L                                                                            | QX*D*                                                                               | QF*D*R/L-H                                                                          | QF*D*LL-H                                                                           | QF*D*RR-H                                                                            | QF*D*R/L-L                                                                            | C*X-Q*DR/L                                                                            |
|  |  |  |  |  |  |  |
| A425                                                                                | A429                                                                                | A434                                                                                | A436                                                                                | A436                                                                                 | A439                                                                                  | A443                                                                                  |

C\*\*\*-Q\*DR/L



A444

D

Informazioni tecniche

E

Indice

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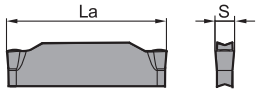
Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456

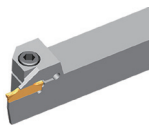
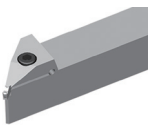
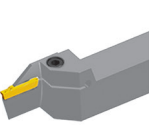
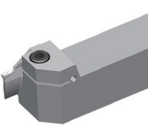
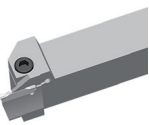
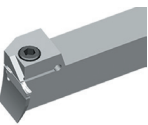
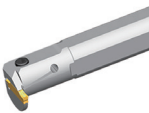
## Inserti per scanalatura e troncatura

-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (bilaterale)                                                                                                                                                                                 |           |    |   |           | HC <sup>1</sup> (CVD) |                                                                                   |                                                                                   |        | HC <sup>1</sup> (PVD) |  |                                                                                     |                                                                                     | HW                                                                                  |                                                                                     |                                                                                     |        |       |       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----|---|-----------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|-----------------------|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|-------|-------|
| <div></div> <div></div> <div>2 taglienti</div> |           |    |   |           | P                     |  |  |        |                       |  |  |  |  |  |                                                                                     |        |       |       |
|                                                                                                                                                                                                                  |           |    |   |           | M                     |                                                                                   |                                                                                   |        |                       |  |  |  |  |  |                                                                                     |        |       |       |
|                                                                                                                                                                                                                  |           |    |   |           | K                     |                                                                                   |                                                                                   |        |                       |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |       |       |
|                                                                                                                                                                                                                  |           |    |   |           | N                     |                                                                                   |                                                                                   |        |                       |  |                                                                                     |                                                                                     |                                                                                     |  |  |        |       |       |
|                                                                                                                                                                                                                  |           |    |   |           | S                     |                                                                                   |                                                                                   |        |                       |  |  |  |  |  |  |        |       |       |
|                                                                                                                                                                                                                  |           |    |   |           | H                     |                                                                                   |                                                                                   |        |                       |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |       |       |
| ISO                                                                                                                                                                                                              |           |    |   | La max    | S±0.025               | f                                                                                 | YBC252                                                                            | YBC251 |                       |  | YBG105                                                                              | YBG102                                                                              | YB9320                                                                              | YBG205                                                                              | YBG202                                                                              | YBG302 | YD101 | YD201 |
|                                                                                                                                 | ZRFD03-EG | 17 | 3 | 0,04-0,14 |                       |                                                                                   |                                                                                   |        |                       |  |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     | ○                                                                                   |        |       |       |
|                                                                                                                                                                                                                  | ZRGD04-EG | 21 | 4 | 0,07-0,2  |                       |                                                                                   |                                                                                   |        |                       |  |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |        |       |       |
|                                                                                                                                                                                                                  | ZRHD05-EG | 20 | 5 | 0,1-0,24  |                       |                                                                                   |                                                                                   |        |                       |  |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     | ○                                                                                   |        |       |       |
|                                                                                                                                                                                                                  | ZRKD06-EG | 19 | 6 | 0,12-0,29 |                       |                                                                                   |                                                                                   |        |                       |  |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |        |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

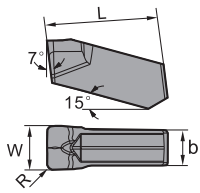
| Utensile                                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| QE*D*R/L                                                                            | QX*D*                                                                               | QF*D*R/L-H                                                                          | QF*D*LL-H                                                                           | QF*D*RR-H                                                                            | QF*D*R/L-L                                                                            | C*X-Q*DR/L                                                                            |
|  |  |  |  |  |  |  |
| A425                                                                                | A429                                                                                | A434                                                                                | A436                                                                                | A436                                                                                 | A439                                                                                  | A443                                                                                  |
| C***-Q*DR/L                                                                         |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|  |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| A444                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

A

Tornitura

Inserti per scanalatura e troncatura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (monolaterale)                                                |  |  |  |  |  |  | HC <sup>1</sup> (CVD) |     | HC <sup>1</sup> (PVD) |             |  |         |  | HW  |  |
|-----------------------------------------------------------------------------------|--|--|--|--|--|--|-----------------------|-----|-----------------------|-------------|--|---------|--|-----|--|
|  |  |  |  |  |  |  | P                     | ● ● |                       |             |  | ● ● ● ● |  |     |  |
|                                                                                   |  |  |  |  |  |  | M                     |     |                       |             |  | ● ● ● ● |  |     |  |
|                                                                                   |  |  |  |  |  |  | K                     |     |                       |             |  | ● ● ● ● |  |     |  |
|                                                                                   |  |  |  |  |  |  | N                     |     |                       |             |  |         |  | ● ● |  |
|                                                                                   |  |  |  |  |  |  | S                     |     |                       | ● ● ● ● ● ● |  |         |  |     |  |
|                                                                                   |  |  |  |  |  |  | H                     |     |                       |             |  |         |  |     |  |

B

Fresatura

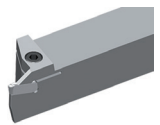
| ISO                                                                               |             | R±0.1 | W±0.05 | b   | L    | f         | YBC252 | YBC251 |  |  |  | YBG105 | YBG102 | YBG320 | YBG205 | YBG202 | YBG302 | YD101 | YD201 |
|-----------------------------------------------------------------------------------|-------------|-------|--------|-----|------|-----------|--------|--------|--|--|--|--------|--------|--------|--------|--------|--------|-------|-------|
|  | ZIMF304N-NM | 0,4   | 3      | 2,4 | 15,3 | 0,04-0,11 |        |        |  |  |  | ●      |        |        |        |        |        |       |       |
|                                                                                   | ZIMF406N-NM | 0,6   | 4      | 3,2 | 15,3 | 0,07-0,16 |        |        |  |  |  | ●      | ○      |        |        |        |        |       |       |
|                                                                                   | ZIMF506N-NM | 0,6   | 5      | 4   | 15,3 | 0,1-0,2   |        |        |  |  |  | ●      | ○      |        |        |        |        |       |       |
|                                                                                   | ZIMF608N-NM | 0,8   | 6      | 4   | 15,3 | 0,12-0,23 |        |        |  |  |  | ●      | ○      |        |        |        |        |       |       |

● In magazzino    ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

C

Foratura

| Utensile                                                                            |
|-------------------------------------------------------------------------------------|
| QE*S*R/L-N                                                                          |
|  |
| A430                                                                                |

D

Informazioni tecniche

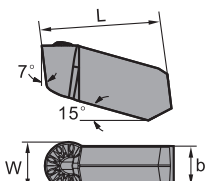
E

Indice



## Inserti per scanalatura e troncatura

-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

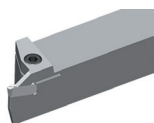
| Inserti scanalatura (monolaterale)                                                |           |   |     |      |           | HC <sup>1</sup> (CVD) |                                                                                   |                                                                                   | HC <sup>1</sup> (PVD) |                  |                                                                                     | HW                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|-----------------------------------------------------------------------------------|-----------|---|-----|------|-----------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|  |           |   |     |      |           | P                     |  |  |                       |                  |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                   |           |   |     |      |           | M                     |                                                                                   |                                                                                   |                       |                  |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                   |           |   |     |      |           | K                     |                                                                                   |                                                                                   |                       |                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                   |           |   |     |      |           | N                     |                                                                                   |                                                                                   |                       |                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |
|                                                                                   |           |   |     |      |           | S                     |                                                                                   |                                                                                   |                       |                  |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |  |
|                                                                                   |           |   |     |      |           | H                     |                                                                                   |                                                                                   |                       |                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| ISO                                                                               |           |   |     |      |           | W±0.05                | b                                                                                 | L                                                                                 | f                     | YBC252<br>YBC251 |                                                                                     |                                                                                     | YBG105<br>YBG102<br>YBG320<br>YBG205<br>YBG202<br>YBG302                            | YD101<br>YD201                                                                      |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|  | ZIGQ3N-NM | 3 | 2,4 | 15,3 | 0,04-0,11 |                       |                                                                                   |                                                                                   |                       |                  |                                                                                     |                                                                                     |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                   | ZIGQ4N-NM | 4 | 3,2 | 15,3 | 0,07-0,16 |                       |                                                                                   |                                                                                   |                       |                  |                                                                                     |                                                                                     |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                   | ZIGQ5N-NM | 5 | 4   | 15,3 | 0,1-0,2   |                       |                                                                                   |                                                                                   |                       |                  |                                                                                     |                                                                                     |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                   | ZIGQ6N-NM | 6 | 5   | 15,3 | 0,13-0,24 |                       |                                                                                   |                                                                                   |                       |                  |                                                                                     |                                                                                     |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                   |           |   |     |      |           |                       |                                                                                   |                                                                                   |                       |                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

Utensile

QE\*S\*R/L-N



A430

A

Tornitura

B

Fresatura

C

Foratura

D

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tecniche

E

Indice

Codice sistema > A398

Scelta gradi > A394

Informazioni tecniche > A501

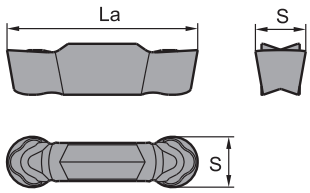
Dati di taglio > A456

A

Tornitura

Inserti per scanalatura e troncatura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (bilaterale)                                                  |          |    |  |  | HC <sup>1</sup> (CVD) |  | HC <sup>1</sup> (PVD) |  |  |  |  | HW |  |
|-----------------------------------------------------------------------------------|----------|----|--|--|-----------------------|--|-----------------------|--|--|--|--|----|--|
|  | <b>P</b> | ●● |  |  |                       |  | ●●●●                  |  |  |  |  |    |  |
|                                                                                   | <b>M</b> |    |  |  |                       |  | ●●●●                  |  |  |  |  |    |  |
|                                                                                   | <b>K</b> |    |  |  |                       |  |                       |  |  |  |  |    |  |
|                                                                                   | <b>N</b> |    |  |  |                       |  |                       |  |  |  |  | ●● |  |
|                                                                                   | <b>S</b> |    |  |  |                       |  | ●●●●                  |  |  |  |  |    |  |
|                                                                                   | <b>H</b> |    |  |  |                       |  |                       |  |  |  |  |    |  |

B

Fresatura

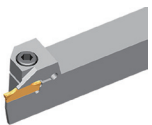
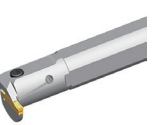
| ISO                                                                               |                  |  |  | La max | S±0.025 | f         | YBC252 | YBC251 |  |  |  | YBG105 | YBG102 | YBG320 | YBG205 | YBG202 | YBG302 | YD101 | YD201 |
|-----------------------------------------------------------------------------------|------------------|--|--|--------|---------|-----------|--------|--------|--|--|--|--------|--------|--------|--------|--------|--------|-------|-------|
|  | <b>ZRKD06-LH</b> |  |  | 19     | 6       | 0,12-0,23 |        |        |  |  |  |        |        |        |        |        |        | ○     |       |
|                                                                                   | <b>ZRLD08-LH</b> |  |  | 22     | 8       | 0,14-0,26 |        |        |  |  |  |        |        |        |        |        |        | ○     |       |
|                                                                                   |                  |  |  |        |         |           |        |        |  |  |  |        |        |        |        |        |        |       |       |
|                                                                                   |                  |  |  |        |         |           |        |        |  |  |  |        |        |        |        |        |        |       |       |
|                                                                                   |                  |  |  |        |         |           |        |        |  |  |  |        |        |        |        |        |        |       |       |

● In magazzino    ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

C

Foratura

| Utensile                                                                            |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| QE*D*R/L                                                                            | C*X-Q*DR/L                                                                          | C***-Q*DR/L                                                                         |
|  |  |  |
| A425                                                                                | A443                                                                                | A444                                                                                |

D

Informazioni tecniche

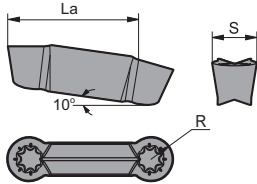
E

Indice



## Inserti per scanalatura e troncatura

-  Buone condizioni di lavorazione
-  Condizioni di lavorazione normali
-  Condizioni di lavorazione sfavorevoli

| Inserti scanalatura (bilaterale)                                                  |                  |        |         |           | HC <sup>1</sup> (CVD) |                                                                                   |                                                                                   |  | HC <sup>1</sup> (PVD) |        |                                                                                     |                                                                                     | HW                                                                                  |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|------------------|--------|---------|-----------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--|-----------------------|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |                  |        |         |           | <b>P</b>              |  |  |  |                       |        |  |  |  |  |                                                                                     |                                                                                     |
|                                                                                   |                  |        |         |           | <b>M</b>              |                                                                                   |                                                                                   |  |                       |        |  |  |  |  |                                                                                     |                                                                                     |
|                                                                                   |                  |        |         |           | <b>K</b>              |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                                                                                   |                  |        |         |           | <b>N</b>              |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |
|                                                                                   |                  |        |         |           | <b>S</b>              |                                                                                   |                                                                                   |  |                       |        |                                                                                     |  |  |  |  |  |
|                                                                                   |                  |        |         |           | <b>H</b>              |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| ISO                                                                               |                  | La max | S±0.025 | f         | YBC252                | YBC251                                                                            |                                                                                   |  | YBG105                | YBG102 | YBG320                                                                              | YBG205                                                                              | YBG202                                                                              | YBG302                                                                              | YD101                                                                               | YD201                                                                               |
|  | <b>ZILD08-LC</b> | 22     | 8       | 0,14-0,26 |                       |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |
|                                                                                   |                  |        |         |           |                       |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                                                                                   |                  |        |         |           |                       |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                                                                                   |                  |        |         |           |                       |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                                                                                   |                  |        |         |           |                       |                                                                                   |                                                                                   |  |                       |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni  
tecniche

**E**

Indice

## Inserti triangolari per scanalatura con tagliente diritto

**QC 22 R 300 – R 03**

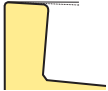
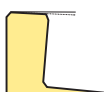
1 2 3 4 5 6

| Serie | Lunghezza tagliente [mm] |       | Direzione di taglio |                                                                                     |
|-------|--------------------------|-------|---------------------|-------------------------------------------------------------------------------------|
|       | Code                     | I.C   | Code                | Descrizione                                                                         |
|       | 11                       | 6,35  | R                   |  |
|       | 16                       | 9,525 |                     |                                                                                     |
|       | 22                       | 12,70 | L                   |  |
|       |                          |       |                     |                                                                                     |

1

2

3

| Larghezza scanalatura [mm] |             | Forma tagliente |                                                                                     | Raggio / Smusso [mm] |             |
|----------------------------|-------------|-----------------|-------------------------------------------------------------------------------------|----------------------|-------------|
| Code                       | Descrizione | Code            | Descrizione                                                                         | Code                 | Descrizione |
| 050                        | 0,50        | R               |   | 005                  | 0,05        |
| 100                        | 1,00        |                 |                                                                                     | 02                   | 0,2         |
| ...                        | ...         | C               |  | 03                   | 0,3         |
| 480                        | 4,80        |                 |                                                                                     | 04                   | 0,4         |
|                            |             |                 |                                                                                     |                      |             |
|                            |             |                 |                                                                                     |                      |             |

4

5

6

## Inserti triangolari per scanalatura con tagliente tondo

**QC 22 R 300 – R**

1 2 3 4 5

| Serie | Lunghezza tagliente [mm] |       | Direzione di taglio |                                                                                     | Larghezza scanalatura [mm] |             | Tondo |
|-------|--------------------------|-------|---------------------|-------------------------------------------------------------------------------------|----------------------------|-------------|-------|
|       | Code                     | I.C   | Code                | Descrizione                                                                         | Code                       | Descrizione |       |
|       | 11                       | 6,35  | R                   |  | 050                        | 0,50        |       |
|       | 16                       | 9,525 |                     |                                                                                     | 100                        | 1,00        |       |
|       | 22                       | 12,70 | L                   |  | ...                        | ...         |       |
|       |                          |       |                     |                                                                                     | 480                        | 4,80        |       |
|       |                          |       |                     |                                                                                     |                            |             |       |
|       |                          |       |                     |                                                                                     |                            |             |       |

1

2

3

4

5

## Inserti per scanalatura e troncatura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| QC ** Inserti - Tornitura/Fresatura |        |         |     |       |      |     |           | HC <sup>1</sup> (CVD) |  | HC <sup>1</sup> (PVD)                                    |  |  |  |  | HW             |  |
|-------------------------------------|--------|---------|-----|-------|------|-----|-----------|-----------------------|--|----------------------------------------------------------|--|--|--|--|----------------|--|
|                                     |        |         |     |       |      |     |           | P                     |  |                                                          |  |  |  |  |                |  |
|                                     |        |         |     |       |      |     |           | M                     |  |                                                          |  |  |  |  |                |  |
|                                     |        |         |     |       |      |     |           | K                     |  |                                                          |  |  |  |  |                |  |
|                                     |        |         |     |       |      |     |           | N                     |  |                                                          |  |  |  |  |                |  |
|                                     |        |         |     |       |      |     |           | S                     |  |                                                          |  |  |  |  |                |  |
|                                     |        |         |     |       |      |     |           | H                     |  |                                                          |  |  |  |  |                |  |
|                                     |        |         |     |       |      |     |           | YBC252<br>YBC251      |  | YBG105<br>YBG102<br>YBG320<br>YBG205<br>YBG202<br>YBG302 |  |  |  |  | YD101<br>YD201 |  |
| ISO                                 | La max | S±0.025 | R/C | ØI.C  | S1   | ød  | f         |                       |  |                                                          |  |  |  |  |                |  |
| QC11R120-R02                        | 1,5    | 1,2     | 0,2 | 6,35  | 3,18 | 2,8 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC11L120-R02                        | 1,5    | 1,2     | 0,2 | 6,35  | 3,18 | 2,8 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC11R125-R02                        | 1,5    | 1,25    | 0,2 | 6,35  | 3,18 | 2,8 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC11L125-R02                        | 1,5    | 1,25    | 0,2 | 6,35  | 3,18 | 2,8 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC11R145-R02                        | 1,5    | 1,45    | 0,2 | 6,35  | 3,18 | 2,8 | 0,02-0,05 |                       |  |                                                          |  |  |  |  |                |  |
| QC11L145-R02                        | 1,5    | 1,45    | 0,2 | 6,35  | 3,18 | 2,8 | 0,02-0,05 |                       |  |                                                          |  |  |  |  |                |  |
| QC11R150-R02                        | 1,5    | 1,5     | 0,2 | 6,35  | 3,18 | 2,8 | 0,02-0,05 |                       |  |                                                          |  |  |  |  |                |  |
| QC11L150-R02                        | 1,5    | 1,5     | 0,2 | 6,35  | 3,18 | 2,8 | 0,02-0,05 |                       |  |                                                          |  |  |  |  |                |  |
| QC11R200-R02                        | 2      | 2       | 0,2 | 6,35  | 3,18 | 2,8 | 0,02-0,06 |                       |  |                                                          |  |  |  |  |                |  |
| QC11L200-R02                        | 2      | 2       | 0,2 | 6,35  | 3,18 | 2,8 | 0,02-0,06 |                       |  |                                                          |  |  |  |  |                |  |
| QC11R225-R02                        | 2      | 2,25    | 0,2 | 6,35  | 3,18 | 2,8 | 0,02-0,06 |                       |  |                                                          |  |  |  |  |                |  |
| QC11L225-R02                        | 2      | 2,25    | 0,2 | 6,35  | 3,18 | 2,8 | 0,02-0,06 |                       |  |                                                          |  |  |  |  |                |  |
| QC16R075-R01                        | 2      | 0,75    | 0,1 | 9,525 | 3,18 | 4,4 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC16L075-R01                        | 2      | 0,75    | 0,1 | 9,525 | 3,18 | 4,4 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC16R080-R01                        | 2      | 0,8     | 0,1 | 9,525 | 3,18 | 4,4 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC16R095-R01                        | 2      | 0,95    | 0,1 | 9,525 | 3,18 | 4,4 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC16L095-R01                        | 2      | 0,95    | 0,1 | 9,525 | 3,18 | 4,4 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC16L100-R01                        | 2      | 1       | 0,1 | 9,525 | 3,18 | 4,4 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC16R110-R01                        | 2      | 1,1     | 0,1 | 9,525 | 3,18 | 4,4 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC16L110-R01                        | 2      | 1,1     | 0,1 | 9,525 | 3,18 | 4,4 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC16R115-R04                        | 2      | 1,15    | 0,4 | 9,525 | 3,18 | 4,4 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC16R120-R01                        | 2      | 1,2     | 0,1 | 9,525 | 3,18 | 4,4 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC16L120-R01                        | 2      | 1,2     | 0,1 | 9,525 | 3,18 | 4,4 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC16R125-R02                        | 2      | 1,25    | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC16L125-R02                        | 2      | 1,25    | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,03 |                       |  |                                                          |  |  |  |  |                |  |
| QC16R130-R02                        | 2      | 1,3     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |                       |  |                                                          |  |  |  |  |                |  |
| QC16L130-R02                        | 2      | 1,3     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |                       |  |                                                          |  |  |  |  |                |  |
| QC16R140-R02                        | 2      | 1,4     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |                       |  |                                                          |  |  |  |  |                |  |
| QC16R145-R02                        | 2      | 1,45    | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |                       |  |                                                          |  |  |  |  |                |  |
| QC16L145-R02                        | 2      | 1,45    | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |                       |  |                                                          |  |  |  |  |                |  |
| QC16R150-R02                        | 2      | 1,5     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |                       |  |                                                          |  |  |  |  |                |  |
| QC16L150-R02                        | 2      | 1,5     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |                       |  |                                                          |  |  |  |  |                |  |
| QC16R160-R02                        | 2      | 1,6     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |                       |  |                                                          |  |  |  |  |                |  |
| QC16L160-R02                        | 2      | 1,6     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |                       |  |                                                          |  |  |  |  |                |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

Codice sistema > A416

Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456



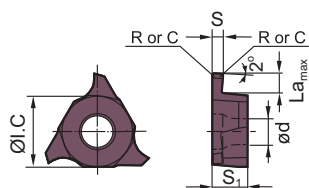
A

Tornitura

## Inserti per scanalatura e troncatura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

QC \*\* Inserti - Tornitura/Fresatura



Versione destra

|   | HC <sup>1</sup> (CVD) | HC <sup>1</sup> (PVD) | HW  |
|---|-----------------------|-----------------------|-----|
| P | ● ● ●                 | ● ● ● ● ●             |     |
| M |                       | ● ● ● ● ●             |     |
| K |                       |                       |     |
| N |                       |                       | ● ● |
| S |                       | ● ● ● ● ●             |     |
| H |                       |                       |     |

B

Fresatura

C

Foratura

D

Informazioni tecniche

E

Indice

| ISO          | La max | S±0.025 | R/C | ØI.C  | S1   | ød  | f         | YBC252 | YBC251 | YBG105 | YBG102 | YBG320 | YBG205 | YBG202 | YBG302 | YD101 | YD201 |
|--------------|--------|---------|-----|-------|------|-----|-----------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| QC16R165-R02 | 2      | 1,65    | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |        |        |        |        |        | ○      |        |        |       |       |
| QC16L165-R02 | 2      | 1,65    | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |        |        |        |        |        | ○      |        |        |       |       |
| QC16R170-R02 | 2      | 1,7     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |        |        |        |        |        | ○      |        |        |       |       |
| QC16L170-R02 | 2      | 1,7     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |        |        |        |        |        | ○      |        |        |       |       |
| QC16R175-R02 | 2      | 1,75    | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,07 |        |        |        |        |        | ●      |        |        |       |       |
| QC16L175-R02 | 2      | 1,75    | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,06 |        |        |        |        |        | ○      |        |        |       |       |
| QC16R180-R02 | 2      | 1,8     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,07 |        |        |        |        |        | ○      |        |        |       |       |
| QC16R185-R02 | 2,5    | 1,85    | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,07 |        |        |        |        |        | ●      |        |        |       |       |
| QC16L185-R02 | 2,5    | 1,85    | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,07 |        |        |        |        |        | ○      |        |        |       |       |
| QC16R200-R02 | 2,5    | 2       | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,07 |        |        |        |        |        | ●      |        |        |       |       |
| QC16L200-R02 | 2,5    | 2       | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,07 |        |        |        |        |        | ●      |        |        |       |       |
| QC16L210-R02 | 2,5    | 2,1     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,07 |        |        |        |        |        | ○      |        |        |       |       |
| QC16L210-R05 | 2,5    | 2,1     | 0,5 | 9,525 | 3,18 | 4,4 | 0,02-0,07 |        |        |        |        |        | ○      |        |        |       |       |
| QC16R220-R02 | 2,5    | 2,2     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,07 |        |        |        |        |        | ○      |        |        |       |       |
| QC16L220-R02 | 2,5    | 2,2     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,07 |        |        |        |        |        | ○      |        |        |       |       |
| QC16R250-R02 | 2,5    | 2,5     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,08 |        |        |        |        |        | ● ○    |        |        |       |       |
| QC16L250-R02 | 2,5    | 2,5     | 0,2 | 9,525 | 3,18 | 4,4 | 0,02-0,08 |        |        |        |        |        | ●      |        |        |       |       |
| QC16R300-R02 | 3      | 3       | 0,2 | 9,525 | 3,18 | 4,4 | 0,03-0,11 |        |        |        |        |        | ●      |        |        |       |       |
| QC16L300-R02 | 3      | 3       | 0,2 | 9,525 | 3,18 | 4,4 | 0,03-0,11 |        |        |        |        |        | ●      |        |        |       |       |
| QC22L100-R02 | 2      | 1       | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,03 |        |        |        |        |        | ○      |        |        |       |       |
| QC22R125-R02 | 2      | 1,25    | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,03 |        |        |        |        |        | ●      |        |        |       |       |
| QC22L125-R02 | 2      | 1,25    | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,03 |        |        |        |        |        | ○      |        |        |       |       |
| QC22R145-R02 | 2      | 1,45    | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,06 |        |        |        |        |        | ○      |        |        |       |       |
| QC22L145-R02 | 2      | 1,45    | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,06 |        |        |        |        |        | ○      |        |        |       |       |
| QC22R150-R02 | 3,5    | 1,5     | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,06 |        |        |        |        |        | ○      |        |        |       |       |
| QC22L150-R02 | 3,5    | 1,5     | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,06 |        |        |        |        |        | ○      |        |        |       |       |
| QC22R175-R02 | 3,5    | 1,75    | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,06 |        |        |        |        |        | ●      |        |        |       |       |
| QC22L175-R02 | 3,5    | 1,75    | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,06 |        |        |        |        |        | ○      |        |        |       |       |
| QC22R185-R02 | 3,5    | 1,85    | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,07 |        |        |        |        |        | ●      |        |        |       |       |
| QC22L185-R02 | 3,5    | 1,85    | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,07 |        |        |        |        |        | ○      |        |        |       |       |
| QC22R195-R02 | 3,5    | 1,95    | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,07 |        |        |        |        |        | ○      |        |        |       |       |
| QC22L195-R02 | 3,5    | 1,95    | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,07 |        |        |        |        |        | ○      |        |        |       |       |
| QC22R200-R02 | 3,5    | 2       | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,07 |        |        |        |        |        | ○      |        |        |       |       |
| QC22L200-R02 | 3,5    | 2       | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,07 |        |        |        |        |        | ○      |        |        |       |       |
| QC22R225-R02 | 3,5    | 2,25    | 0,2 | 12,7  | 4,76 | 5,5 | 0,02-0,07 |        |        |        |        |        | ○      |        |        |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

Codice sistema > A416

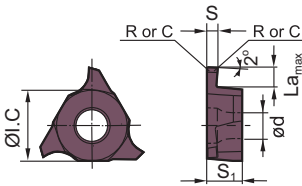
Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456

## Inserti per scanalatura e troncatura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| QC ** Inserti - Tornitura/Fresatura                                                                                     |              |        |         |     |      |      |     | HC¹ (CVD) |                                                                                   |                                                                                    |  | HC¹ (PVD) |  |        |                                                                                     | HW                                                                                  |                                                                                     |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------|--------------|--------|---------|-----|------|------|-----|-----------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|-----------|--|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <div></div> <div>Versione destra</div> |              |        |         |     |      |      |     | <b>P</b>  |  |  |  |           |  |        |  |  |  |  |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         |              |        |         |     |      |      |     | <b>M</b>  |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |  |  |  |  |       |                                                                                     |                                                                                     |
|                                                                                                                         |              |        |         |     |      |      |     | <b>K</b>  |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         |              |        |         |     |      |      |     | <b>N</b>  |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |  |  |
|                                                                                                                         |              |        |         |     |      |      |     | <b>S</b>  |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |  |  |  |  |       |                                                                                     |                                                                                     |
|                                                                                                                         |              |        |         |     |      |      |     | <b>H</b>  |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
| ISO                                                                                                                     |              | La max | S±0.025 | R/C | Øl.C | S1   | ød  | f         | YBC252                                                                            | YBC251                                                                             |  |           |  | YBG105 | YBG102                                                                              | YBG320                                                                              | YBG205                                                                              | YBG202                                                                              | YBG302                                                                              | YD101 | YD201                                                                               |                                                                                     |
|                                      | QC22R230-R02 | 3,5    | 2,3     | 0,2 | 12,7 | 4,76 | 5,5 | 0,02-0,07 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22L230-R02 | 3,5    | 2,3     | 0,2 | 12,7 | 4,76 | 5,5 | 0,02-0,07 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22R250-R03 | 4      | 2,5     | 0,3 | 12,7 | 4,76 | 5,5 | 0,02-0,08 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22L250-R03 | 4      | 2,5     | 0,3 | 12,7 | 4,76 | 5,5 | 0,02-0,08 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22R265-R03 | 4      | 2,65    | 0,3 | 12,7 | 4,76 | 5,5 | 0,02-0,08 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22L265-R03 | 4      | 2,65    | 0,3 | 12,7 | 4,76 | 5,5 | 0,02-0,08 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22R280-R03 | 4      | 2,8     | 0,3 | 12,7 | 4,76 | 5,5 | 0,02-0,08 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22L280-R03 | 4      | 2,8     | 0,3 | 12,7 | 4,76 | 5,5 | 0,02-0,08 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22R300-R03 | 4      | 3       | 0,3 | 12,7 | 4,76 | 5,5 | 0,03-0,11 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22L300-R03 | 4      | 3       | 0,3 | 12,7 | 4,76 | 5,5 | 0,03-0,11 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22R320-R03 | 4      | 3,2     | 0,3 | 12,7 | 4,76 | 5,5 | 0,03-0,11 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22L320-R03 | 4      | 3,2     | 0,3 | 12,7 | 4,76 | 5,5 | 0,03-0,11 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22R330-R03 | 4      | 3,3     | 0,3 | 12,7 | 4,76 | 5,5 | 0,03-0,11 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22L330-R03 | 4      | 3,3     | 0,3 | 12,7 | 4,76 | 5,5 | 0,03-0,11 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22R350-R03 | 5      | 3,5     | 0,3 | 12,7 | 4,76 | 5,5 | 0,05-0,13 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22L350-R03 | 5      | 3,5     | 0,3 | 12,7 | 4,76 | 5,5 | 0,05-0,13 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22R400-R04 | 5      | 4       | 0,4 | 12,7 | 4,76 | 5,5 | 0,05-0,14 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22L400-R04 | 5      | 4       | 0,4 | 12,7 | 4,76 | 5,5 | 0,05-0,14 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ●                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22R430-R04 | 5      | 4,3     | 0,4 | 12,7 | 4,76 | 5,5 | 0,05-0,14 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22L430-R04 | 5      | 4,3     | 0,4 | 12,7 | 4,76 | 5,5 | 0,05-0,14 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   | ○                                                                                   |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22R450-R04 | 5      | 4,5     | 0,4 | 12,7 | 4,76 | 5,5 | 0,06-0,18 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22L450-R04 | 5      | 4,5     | 0,4 | 12,7 | 4,76 | 5,5 | 0,06-0,18 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       | ○                                                                                   |                                                                                     |
|                                                                                                                         | QC22R480-R04 | 5      | 4,8     | 0,4 | 12,7 | 5,06 | 5,5 | 0,06-0,18 |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |
|                                                                                                                         | QC22L480-R04 | 5      | 4,8     | 0,4 | 12,7 | 5,06 | 5,5 | 0,08-0,2  |                                                                                   |                                                                                    |  |           |  |        |                                                                                     |                                                                                     | ○                                                                                   |                                                                                     |                                                                                     |       |                                                                                     |                                                                                     |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

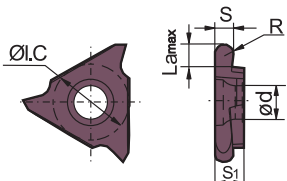
| Utensile |              |
|----------|--------------|
| GQCR/L   | S***.QC**R/L |
|          |              |
| A453     | A454         |

A

Tornitura

## Inserti per scanalatura e troncatura

- Buone condizioni di lavorazione
- Condizioni di lavorazione normali
- Condizioni di lavorazione sfavorevoli

| QC ** Inserti - Tornitura/Fresatura                                                                      |   |   |   |  |  |  |  | HC <sup>1</sup> (CVD) |  | HC <sup>1</sup> (PVD) |   |   | HW |   |
|----------------------------------------------------------------------------------------------------------|---|---|---|--|--|--|--|-----------------------|--|-----------------------|---|---|----|---|
|  <p>Versione destra</p> | P | ● | ● |  |  |  |  |                       |  | ●                     | ● | ● |    |   |
|                                                                                                          | M |   |   |  |  |  |  |                       |  | ●                     | ● | ● |    |   |
|                                                                                                          | K |   |   |  |  |  |  |                       |  | ●                     | ● | ● |    |   |
|                                                                                                          | N |   |   |  |  |  |  |                       |  |                       |   |   | ●  | ● |
|                                                                                                          | S |   |   |  |  |  |  |                       |  | ●                     | ● | ● |    |   |
|                                                                                                          | H |   |   |  |  |  |  |                       |  |                       |   |   |    |   |

B

Fresatura

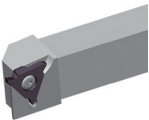
| ISO                                                                                 |           | La max | S±0.025 | R/C  | ØI.C | S1   | ød  | f         | YBC252 | YBC251 |  |  | YBG105 | YBG102 | YBG320 | YBG205 | YBG202 | YBG302 | YD101 | YD201 |
|-------------------------------------------------------------------------------------|-----------|--------|---------|------|------|------|-----|-----------|--------|--------|--|--|--------|--------|--------|--------|--------|--------|-------|-------|
|  | QC16R100R | 2      | 1       | 0,5  | 12,7 | 3,18 | 4,4 | 0,02-0,03 |        |        |  |  |        |        | ○      |        |        |        |       |       |
|                                                                                     | QC16R120R | 2      | 1,2     | 0,6  | 12,7 | 3,18 | 4,4 | 0,02-0,03 |        |        |  |  |        |        | ○      |        |        |        |       |       |
|                                                                                     | QC16R150R | 2      | 1,5     | 0,75 | 12,7 | 3,18 | 4,4 | 0,02-0,06 |        |        |  |  |        |        | ○      |        |        |        |       |       |
|                                                                                     | QC16R200R | 2,5    | 2       | 1    | 12,7 | 3,18 | 4,4 | 0,02-0,07 |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                     | QC16L200R | 2,5    | 2       | 1    | 12,7 | 3,18 | 4,4 | 0,02-0,07 |        |        |  |  |        |        | ○      |        |        |        |       |       |
|                                                                                     | QC16R250R | 2,5    | 2,5     | 1,25 | 12,7 | 3,18 | 4,4 | 0,02-0,08 |        |        |  |  |        |        | ○      |        |        |        |       |       |
|                                                                                     | QC16L280R | 2,5    | 2,8     | 1,4  | 12,7 | 3,18 | 4,4 | 0,02-0,08 |        |        |  |  |        |        | ○      |        |        |        |       |       |
|                                                                                     | QC16R300R | 2,5    | 3       | 1,5  | 12,7 | 3,18 | 4,4 | 0,03-0,11 |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                     | QC16L300R | 2,5    | 3       | 1,5  | 12,7 | 3,18 | 4,4 | 0,03-0,11 |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                     | QC22R100R | 2      | 1       | 0,5  | 12,7 | 4,76 | 5,5 | 0,02-0,03 |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                     | QC22L100R | 2      | 1       | 0,5  | 12,7 | 4,76 | 5,5 | 0,02-0,03 |        |        |  |  |        |        | ○ ○    |        |        |        |       |       |
|                                                                                     | QC22R150R | 3,5    | 1,5     | 0,75 | 12,7 | 4,76 | 5,5 | 0,02-0,06 |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                     | QC22L150R | 3,5    | 1,5     | 0,75 | 12,7 | 4,76 | 5,5 | 0,02-0,06 |        |        |  |  |        |        | ● ○    |        |        |        |       |       |
|                                                                                     | QC22R170R | 3,5    | 1,7     | 0,85 | 12,7 | 4,76 | 5,5 | 0,02-0,06 |        |        |  |  |        |        | ○      |        |        |        |       |       |
|                                                                                     | QC22R200R | 3,5    | 2       | 1    | 12,7 | 4,76 | 5,5 | 0,02-0,07 |        |        |  |  |        |        | ○      |        |        |        |       |       |
|                                                                                     | QC22L200R | 3,5    | 2       | 1    | 12,7 | 4,76 | 5,5 | 0,02-0,07 |        |        |  |  |        |        | ○      |        |        |        |       |       |
|                                                                                     | QC22R250R | 4      | 2,5     | 1,25 | 12,7 | 4,76 | 5,5 | 0,02-0,08 |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                     | QC22L250R | 4      | 2,5     | 1,25 | 12,7 | 4,76 | 5,5 | 0,02-0,08 |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                     | QC22R300R | 4      | 3       | 1,5  | 12,7 | 4,76 | 5,5 | 0,03-0,11 |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                     | QC22L300R | 4      | 3       | 1,5  | 12,7 | 4,76 | 5,5 | 0,03-0,11 |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                     | QC22R320R | 4      | 3,2     | 1,6  | 12,7 | 4,76 | 5,5 | 0,03-0,11 |        |        |  |  |        |        | ○      |        |        |        |       |       |
|                                                                                     | QC22R400R | 5      | 4       | 2    | 12,7 | 4,76 | 5,5 | 0,05-0,14 |        |        |  |  |        |        | ●      |        |        |        |       |       |
|                                                                                     | QC22L400R | 5      | 4       | 2    | 12,7 | 4,76 | 5,5 | 0,05-0,14 |        |        |  |  |        |        | ●      |        |        |        |       |       |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito  
HW Carburo cementato non rivestito

D

Informazioni tecniche

| Utensile                                                                            |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| GQCR/L                                                                              | S***-QC**R/L                                                                        |
|  |  |
| A453                                                                                | A454                                                                                |

E

Indice

Codice sistema > A416

Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456



## Tornitura

## Fresatura

## Foratura

## Informazioni tecniche

## Indice

## Portautensili esterni

**Q F G D 2525 R 22 (S) C – (130) (H)**

1

2

3

4

5

6

7

8

9

10

11

Portautensili per  
scanalatura e  
troncatura

### Applicazione

| Code | Descrizione         |
|------|---------------------|
| E    | Lavorazione esterna |
| F    | Lavorazione assiale |
|      |                     |
|      |                     |
|      |                     |
|      |                     |
|      |                     |
|      |                     |

### Dim. sede inserto [mm]

Larghezza portautensile/tagliente

| Code | Descrizione |
|------|-------------|
| A    | 1,5         |
| B    | 2,0         |
| E    | 2,5         |
| F    | 3,0         |
| G    | 4,0         |
| H    | 5,0         |
| K    | 6,0         |
| L    | 8,0         |

1

2

3

### Numero taglienti

| Code | Descrizione |
|------|-------------|
| S    | Singolo     |
| D    | Doppio      |

Sezione portautensile  
[mm] x [mm]

### Versione

| Code | Descrizione       |
|------|-------------------|
| R    | Destra            |
| L    | Sinistra          |
| N    | Destro e sinistro |

4

5

6

Max. profondità di taglio  
[mm]

### Extra

| Code | Descrizione                                                         |
|------|---------------------------------------------------------------------|
| S    | Portautensile rinforzato per tagli profondi                         |
| DG   | Portautensile con rinforzo per maggiore profondità di scanalatura   |
| DGS  | Portautensile senza rinforzo per maggiore profondità di scanalatura |

7

8

Con raffreddamento interno

Diametro min. del pezzo per scanalatura assiale  
[mm]

### Testa tagliente

| Code | Descrizione |
|------|-------------|
| H    | 0°          |
| L    | 90°         |

9

10

11

**Barre alesatrici****C 32 S – Q G D R 11 – 44****1****2****3****4****5****6****7****8****9****Sistema di bloccaggio****1****Diametro [mm]****2****Lunghezza [mm]**

Code Descrizione

Q 180

R 200

S 250

X 320

**Portautensile per scanalatura****4****Dim. sede inserto [mm]**

Larghezza portautensile/tagliente

Code Descrizione

B 2.0

E 2.5

F 3.0

G 4.0

H 5.0

K 6.0

L 8.0

**5****Numero taglienti**

Code Descrizione

S Singolo

D Doppio

**6****Versione**

Code Descrizione

R Destra

L Sinistra

N Destro e sinistro

**7****Profondità di taglio max. [mm]****8****Diametro interno min. del pezzo [mm]****9**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni tecniche

**E**

Indice

## Lama

**Q E G D 32 N (-1)**

**1 2 3 4 5 6 7**

Lama per scanalatura  
e troncatura

**1**

### Applicazione

| Code | Descrizione         |
|------|---------------------|
| E    | Lavorazione esterna |
|      |                     |
|      |                     |
|      |                     |
|      |                     |
|      |                     |
|      |                     |
|      |                     |

**2**

### Dim. sede inserto [mm]

Larghezza portautensile/tagliente

| Code | Descrizione |
|------|-------------|
| B    | 2,0         |
| E    | 2,5         |
| F    | 3,0         |
| G    | 4,0         |
| H    | 5,0         |
| K    | 6,0         |
| L    | 8,0         |

**3**

### Numero taglienti

| Code | Descrizione |
|------|-------------|
| S    | Singolo     |
| D    | Doppio      |

**4**

Altezza lama  
[mm]

**5**

### Versione

| Code | Descrizione       |
|------|-------------------|
| R    | Destra            |
| L    | Sinistra          |
| N    | Destro e sinistro |

**6**

Altezza lama –1 mm

**7**

## Portautensile

**QZ S 32 32**

**1 2 3 4**

Utensile per scanalatura

**1**

### Numero taglienti

| Code | Descrizione |
|------|-------------|
| S    | Singolo     |
| D    | Doppio      |

**2**

Altezza attacchi  
[mm]

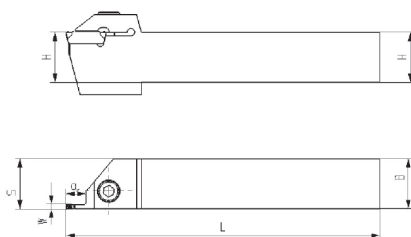
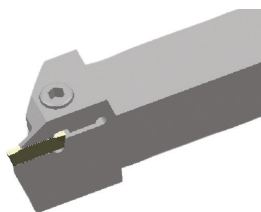
**3**

Altezza lama  
[mm]

**4**

**Portautensile per scanalatura (esterna)**

QE\*\*R/L



| Articolo      | * | Stock |   | Dimensioni [mm] |     |       |     |                   | Inserto |
|---------------|---|-------|---|-----------------|-----|-------|-----|-------------------|---------|
|               |   | R     | L | HxB             | L   | S     | W   | ar <sub>max</sub> |         |
| QEBD1616R/L04 | ○ | ○     |   | 16x16           | 150 | 16,17 | 2   | 4                 | Z*BD**  |
| QEBD2020R/L07 | ○ | ○     |   | 20x20           | 150 | 20,17 | 2   | 7                 | Z*BD**  |
| QEED1616R/L10 | ● | ●     |   | 16x16           | 125 | 15    | 2,5 | 10                | Z*ED**  |
| QEED1616R/L17 | ● | ●     |   | 16x16           | 125 | 15    | 2,5 | 17                | Z*ED**  |
| QEED2020R/L17 | ● | ●     |   | 20x20           | 125 | 19    | 2,5 | 17                | Z*ED**  |
| QEED2020R/L10 | ● | ●     |   | 20x20           | 150 | 10    | 2,5 | 10                | Z*ED**  |
| QEED2525R/L10 | ● | ●     |   | 25x25           | 150 | 19    | 2,5 | 10                | Z*ED**  |
| QEED2525R/L17 | ● | ●     |   | 25x25           | 150 | 19    | 2,5 | 17                | Z*ED**  |
| Qefd1616R/L10 | ● | ●     |   | 16x16           | 125 | 14,8  | 3   | 10                | Z*FD**  |
| Qefd1616R/L17 | ● | ●     |   | 16x16           | 125 | 14,8  | 3   | 17                | Z*FD**  |
| Qefd2020R/L10 | ● | ●     |   | 20x20           | 125 | 18,8  | 3   | 10                | Z*FD**  |
| Qefd2020R/L17 | ● | ●     |   | 20x20           | 125 | 18,8  | 3   | 17                | Z*FD**  |
| Qefd2525R/L10 | ● | ●     |   | 25x25           | 150 | 23,8  | 3   | 10                | Z*FD**  |
| Qefd2525R/L17 | ● | ●     |   | 25x25           | 150 | 23,8  | 3   | 17                | Z*FD**  |
| QEGD2020R/L13 | ● | ●     |   | 20x20           | 140 | 18,5  | 4   | 13                | Z*GD**  |
| QEGD2020R/L22 | ● | ●     |   | 20x20           | 140 | 18,5  | 4   | 22                | Z*GD**  |
| QEGD2525R/L13 | ● | ●     |   | 25x25           | 150 | 23,5  | 4   | 13                | Z*GD**  |
| QEGD2525R/L22 | ● | ●     |   | 25x25           | 150 | 23,5  | 4   | 22                | Z*GD**  |
| QEGD3232R/L13 | ● | ●     |   | 32x32           | 170 | 30,5  | 4   | 13                | Z*GD**  |
| QEGD3232R/L22 | ● | ●     |   | 32x32           | 170 | 30,5  | 4   | 22                | Z*GD**  |
| QEHD2525R/L13 | ● | ●     |   | 25x25           | 150 | 23    | 5   | 13                | Z*HD**  |
| QEHD2525R/L22 | ● | ●     |   | 25x25           | 150 | 23    | 5   | 22                | Z*HD**  |
| QEHD3232R/L13 | ● | ●     |   | 32x32           | 170 | 30    | 5   | 13                | Z*HD**  |
| QEHD3232R/L22 | ● | ●     |   | 32x32           | 170 | 30    | 5   | 22                | Z*HD**  |
| QEKD2525R/L13 | ● | ●     |   | 25x25           | 150 | 22,6  | 6   | 13                | Z*KD**  |
| QEKD2525R/L22 | ● | ●     |   | 25x25           | 150 | 22,6  | 6   | 22                | Z*KD**  |
| QEKD3232R/L13 | ● | ●     |   | 32x32           | 170 | 29,6  | 6   | 13                | Z*KD**  |
| QEKD3232R/L22 | ● | ●     |   | 32x32           | 170 | 29,6  | 6   | 22                | Z*KD**  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Portautensile per scanalatura (esterna)

Parti di ricambio

|                                                                                   | Inserto<br>H | Z*BD**<br>16-20           | Z*ED**<br>16              | Z*ED**<br>20-32           | Z*FD**<br>16              | Z*FD**<br>20-32           | Z*GD**<br>20-32           | Z*HD**<br>20-32           | Z*KD**<br>20-32           |
|-----------------------------------------------------------------------------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
|  | Vite         | GB70-85-M5×16<br>(4,0 Nm) | GB70-85-M5×20<br>(4,0 Nm) | GB70-85-M6×20<br>(7,0 Nm) | GB70-85-M5×20<br>(4,0 Nm) | GB70-85-M6×20<br>(7,0 Nm) | GB70-85-M6×20<br>(7,0 Nm) | GB70-85-M6×20<br>(7,0 Nm) | GB70-85-M6×20<br>(7,0 Nm) |
|  | Chiave       | WH40L                     | WH40L                     | WH50L                     | WH40L                     | WH50L                     | WH50L                     | WH50L                     | WH50L                     |

Inserto

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| A399                                                                              | A400                                                                              | A401                                                                              | A404                                                                              | A407                                                                               | A410                                                                                | A411                                                                                |



A414

Codice sistema > A422

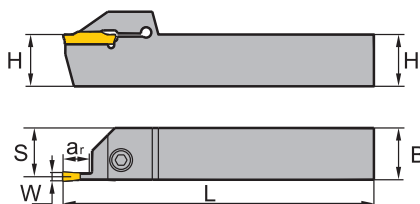
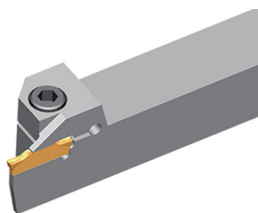
Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456

**Portautensile per scanalatura (esterna)**

QE\*SN30



| Articolo    | * | Stock | Dimensioni [mm] |     |      |   |                   | Inserto |
|-------------|---|-------|-----------------|-----|------|---|-------------------|---------|
|             |   |       | HxB             | L   | S    | W | ar <sub>max</sub> |         |
| QEHS2525N30 | ● |       | 25x25           | 150 | 12,5 | 5 | 30                | Z*HS**  |
| QEHS3232N30 | ● |       | 32x32           | 170 | 16   | 5 | 30                | Z*HS**  |
| QEKs2525N30 | ○ |       | 25x25           | 150 | 12,5 | 6 | 30                | Z*Ks**  |
| QEKs3232N30 | ○ |       | 32x32           | 170 | 16   | 6 | 30                | Z*Ks**  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |         |                           |                           |
|-------------------|---------|---------------------------|---------------------------|
|                   | Inserto | Z*HS**                    | Z*Ks**                    |
|                   | H       | 25-32                     | 25-32                     |
|                   | Vite    | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) |
|                   | Chiave  | WH50L                     | WH50L                     |

| Inserto |      |      |
|---------|------|------|
|         |      |      |
| A402    | A405 | A406 |

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni  
tecniche

**E**

Indice

Codice sistema &gt; A422

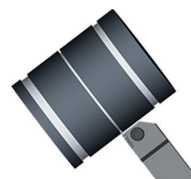
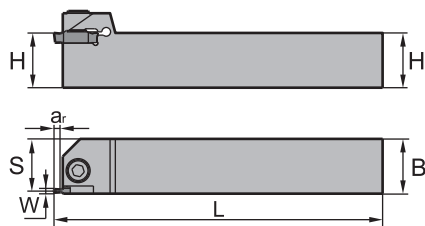
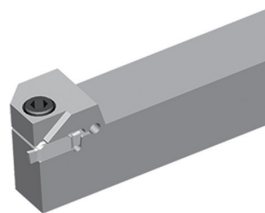
Scelta gradi &gt; A394

Informazioni tecniche &gt; A501

Dati di taglio &gt; A456

## Portautensile per scanalatura (esterna)

QECDR/L



Versione destra

| Articolo       | * | Stock |   | Dimensioni [mm] |     |       |   |                   | Inserto |
|----------------|---|-------|---|-----------------|-----|-------|---|-------------------|---------|
|                |   | R     | L | HxB             | L   | S     | W | ar <sub>max</sub> |         |
| QECD1616R/L025 |   | ○     | ○ | 16x16           | 125 | 14,75 |   | 2,5               | Z*CD**  |
| QECD2020R/L025 |   | ○     | ○ | 20x20           | 125 | 18,75 |   | 2,5               | Z*CD**  |
| QECD2525R/L025 |   | ○     | ○ | 25x25           | 150 | 23,75 |   | 2,5               | Z*CD**  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

|  | Inserto | Z*CD**                    | Z*CD**                    |
|--|---------|---------------------------|---------------------------|
|  | H       | 16                        | 20-32                     |
|  | Vite    | GB70-85-M5x20<br>(4,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) |
|  | Chiave  | WH40L                     | WH50L                     |

Inserto

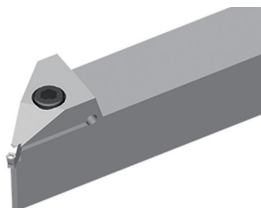


A407

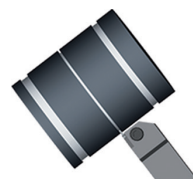
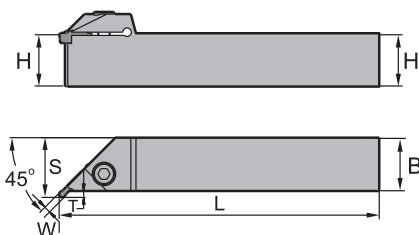


**Portautensile per scanalatura (esterna)**

QX\*DR/L



Versione destra



| Articolo         | * | Stock |   | Dimensioni [mm] |     |    |   |                   | Inserto |
|------------------|---|-------|---|-----------------|-----|----|---|-------------------|---------|
|                  |   | R     | L | HxB             | L   | S  | W | ar <sub>max</sub> |         |
| QXFD2020R/L03-45 | ○ | ○     |   | 20x20           | 125 | 23 | 3 | 3                 | Z*FD**  |
| QXFD2525R/L03-45 | ● | ●     |   | 25x25           | 150 | 28 | 3 | 3                 | Z*FD**  |
| QXFD3232R/L03-45 | ○ | ○     |   | 32x32           | 170 | 35 | 3 | 3                 | Z*FD**  |
| QXGD2020R/L03-45 | ○ | ○     |   | 20x20           | 125 | 23 | 4 | 3                 | Z*GD**  |
| QXGD2525R/L03-45 | ○ | ○     |   | 25x25           | 150 | 28 | 4 | 3                 | Z*GD**  |
| QXGD3232R/L03-45 | ○ | ○     |   | 32x32           | 170 | 35 | 4 | 3                 | Z*GD**  |
| QXHD2020R/L04-45 | ○ | ○     |   | 20x20           | 125 | 24 | 5 | 4                 | Z*HD**  |
| QXHD2525R/L04-45 | ○ | ○     |   | 25x25           | 150 | 29 | 5 | 4                 | Z*HD**  |
| QXHD3232R/L04-45 | ○ | ○     |   | 32x32           | 170 | 36 | 5 | 4                 | Z*HD**  |
| QXKD2020R/L04-45 | ○ | ○     |   | 20x20           | 125 | 24 | 6 | 4                 | Z*KD**  |
| QXKD2525R/L04-45 | ○ | ○     |   | 25x25           | 150 | 29 | 6 | 4                 | Z*KD**  |
| QXKD3232R/L04-45 | ○ | ○     |   | 32x32           | 170 | 36 | 6 | 4                 | Z*KD**  |

● In magazzino ○ Su richiesta

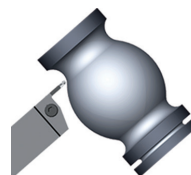
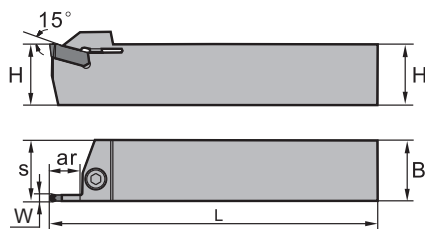
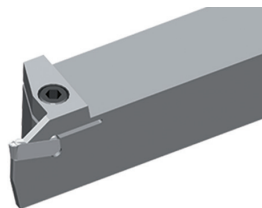
\* Con raffreddamento interno

| Parti di ricambio |         |                           |                           |                           |                           |
|-------------------|---------|---------------------------|---------------------------|---------------------------|---------------------------|
|                   | Inserto | Z*FD**                    | Z*GD**                    | Z*HD**                    | Z*KD**                    |
|                   | H       | 20-32                     | 20-32                     | 20-32                     | 20-32                     |
|                   | Vite    | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) |
|                   | Chiave  | WH50L                     | WH50L                     | WH50L                     | WH50L                     |

| Inserto |      |
|---------|------|
|         |      |
| A410    | A411 |

## Portautensile per scanalatura (esterna)

QE\*SR/L



Versione destra

| Articolo         | * | Stock |   | Dimensioni [mm] |     |      |   |                   | Inserto |
|------------------|---|-------|---|-----------------|-----|------|---|-------------------|---------|
|                  |   | R     | L | HxB             | L   | S    | W | ar <sub>max</sub> |         |
| QEF52525R/L12-3N | ○ | ○     |   | 25x25           | 150 | 25,3 | 3 | 12                | ZI**    |
| QEG52525R/L12-4N | ○ | ○     |   | 25x25           | 150 | 25,3 | 4 | 12                | ZI**    |
| QEH52525R/L12-5N | ○ | ○     |   | 25x25           | 150 | 25,4 | 5 | 12                | ZI**    |
| QEK52525R/L12-6N | ○ | ○     |   | 25x25           | 150 | 25,4 | 6 | 12                | ZI**    |
| QEF53232R/L22-3N | ○ | ○     |   | 32x32           | 170 | 32,3 | 3 | 22                | ZI**    |
| QEG53232R/L22-4N | ○ | ○     |   | 32x32           | 170 | 32,3 | 4 | 22                | ZI**    |
| QEH53232R/L22-5N | ○ | ○     |   | 32x32           | 170 | 32,4 | 5 | 22                | ZI**    |
| QEK53232R/L22-6N | ○ |       |   | 32x32           | 170 | 32,4 | 6 | 22                | ZI**    |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

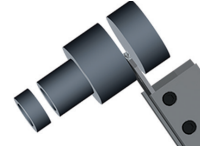
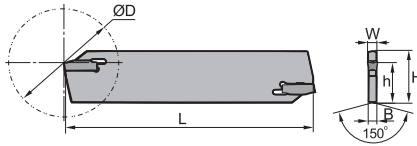
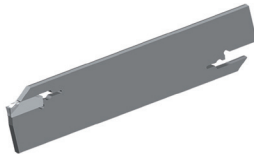
|  | Inserto | ZI**                      |
|--|---------|---------------------------|
|  | H       | 25-32                     |
|  | Vite    | GB70-85-M6x20<br>(7,0 Nm) |
|  | Chiave  | WH50L                     |

### Inserto

|      |      |
|------|------|
|      |      |
| A412 | A413 |

**Lame per gole per lavorazione esterna**

QE\*S\*\*N



| Articolo | * | Stock | Dimensioni [mm] |     |      |     |     |       | Inserto |
|----------|---|-------|-----------------|-----|------|-----|-----|-------|---------|
|          |   |       | H               | L   | h    | B   | W   | ØDmax |         |
| QEES26N  |   | ●     | 26              | 110 | 19   | 2   | 2,5 | 60    | ZPES**  |
| QEES32N  |   | ●     | 32              | 150 | 24,6 | 2   | 2,5 | 100   | ZPES**  |
| QEFS26N  |   | ●     | 26              | 110 | 19   | 2,4 | 3   | 60    | ZPFS**  |
| QEFS32N  |   | ●     | 32              | 150 | 24,6 | 2,4 | 3   | 100   | ZPFS**  |
| QEGS26N  |   | ●     | 26              | 110 | 19   | 3,2 | 4   | 70    | ZPGS**  |
| QEGS32N  |   | ●     | 32              | 150 | 24,6 | 3,2 | 4   | 120   | ZPGS**  |
| QEHS26N  |   | ●     | 26              | 110 | 19   | 4   | 5   | 70    | ZPHS**  |
| QEHS32N  |   | ●     | 32              | 150 | 24,6 | 4   | 5   | 120   | ZPHS**  |
| QEKS26N  |   | ●     | 26              | 110 | 19   | 5   | 6   | 70    | ZPKS**  |
| QEKS32N  |   | ●     | 32              | 150 | 24,6 | 5   | 6   | 120   | ZPKS**  |

● In magazzino ○ Su richiesta

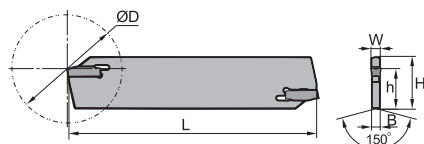
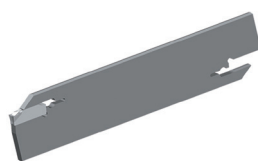
\* Con raffreddamento interno

| Parti di ricambio |         |        |        |        |        |        |
|-------------------|---------|--------|--------|--------|--------|--------|
|                   | Inserto | ZPES** | ZPFS** | ZPGS** | ZPHS** | ZPKS** |
|                   | H       | 26-32  | 26-32  | 26-32  | 26-32  | 26-32  |
|                   | Chiave  | W50RL  | W50RL  | W50RL  | W50RL  | W50RL  |

| Inserto |      |      |      |
|---------|------|------|------|
|         |      |      |      |
| A402    | A403 | A405 | A406 |

## Lame per gole per lavorazione esterna

QE\*S\*\*N-1



| Articolo  | * | Stock | Dimensioni [mm] |     |      |     |     |       | Inserto |
|-----------|---|-------|-----------------|-----|------|-----|-----|-------|---------|
|           |   |       | H               | L   | h    | B   | W   | ØDmax |         |
| QEES26N-1 | ● |       | 26              | 110 | 19   | 2   | 2,5 | 60    | ZPES**  |
| QEES32N-1 | ● |       | 32              | 150 | 24,6 | 2   | 2,5 | 100   | ZPES**  |
| QEFS26N-1 | ● |       | 26              | 110 | 19   | 2,4 | 3   | 60    | ZPFS**  |
| QEFS32N-1 | ● |       | 32              | 150 | 24,6 | 2,4 | 3   | 100   | ZPFS**  |
| QEGS26N-1 | ● |       | 26              | 110 | 19   | 3,2 | 4   | 70    | ZPGS**  |
| QEGS32N-1 | ● |       | 32              | 150 | 24,6 | 3,2 | 4   | 120   | ZPGS**  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

Compatibile solo con i blocchi di serraggio dei sistemi disponibili in commercio di altri produttori.

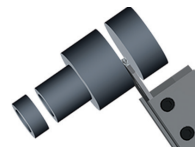
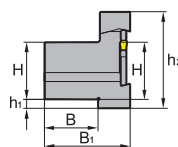
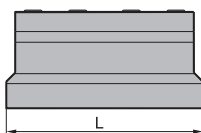
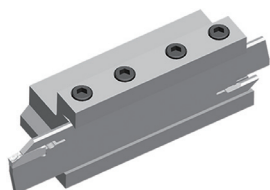
| Parti di ricambio |         |        |        |        |
|-------------------|---------|--------|--------|--------|
|                   | Inserto | ZPES** | ZPFS** | ZPGS** |
|                   | H       | 26-32  | 26-32  | 26-32  |
|                   | Chiave  | W50X   | W50X   | W50X   |

La chiave W50X deve essere ordinata come opzione.

| Inserto |      |      |
|---------|------|------|
|         |      |      |
| A402    | A403 | A406 |

**Portautensile (esterna)**

QZS\*



| Articolo | * | Stock | Dimensioni [mm] |     |                |                |    |                | Inserto |
|----------|---|-------|-----------------|-----|----------------|----------------|----|----------------|---------|
|          |   |       | H               | L   | h <sub>1</sub> | h <sub>2</sub> | B  | B <sub>1</sub> |         |
| QZS2026  | ● |       | 20              | 86  | 10             | 46,6           | 19 | 38             | QE**26  |
| QZS2526  | ● |       | 25              | 86  | 5              | 46,6           | 23 | 42             | QE**26  |
| QZS3226  | ○ |       | 32              | 86  | 3              | 51,6           | 30 | 48             | QE**26  |
| QZS2032  | ● |       | 20              | 110 | 13             | 50             | 19 | 38             | QE**32  |
| QZS2532  | ● |       | 25              | 110 | 8              | 50             | 23 | 42             | QE**32  |
| QZS3232  | ● |       | 32              | 110 | 5              | 54             | 30 | 48             | QE**32  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |         |                           |                           |
|-------------------|---------|---------------------------|---------------------------|
|                   | Inserto | QE**26                    | QE**32                    |
|                   | H       | 20-32                     | 20-32                     |
|                   | Staffa  | QZC26                     | QZC32                     |
|                   | Vite    | GB70-85-M6×20<br>(7,0 Nm) | GB70-85-M6×20<br>(7,0 Nm) |
|                   | Chiave  | W50RL                     | W50RL                     |

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

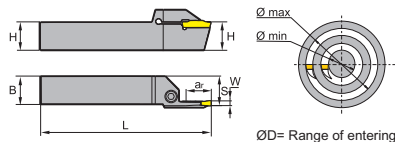
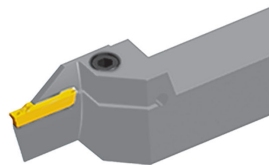
Informazioni  
tecniche

**E**

Indice

## Portautensile per scanalatura (assiale)

QF\*\*R/L



Versione sinistra

| Articolo           | * | Stock |   | Dimensioni [mm] |     |    |   |                   |                 | Inserto |
|--------------------|---|-------|---|-----------------|-----|----|---|-------------------|-----------------|---------|
|                    |   | R     | L | HxB             | L   | S  | W | ar <sub>max</sub> | ØD<br>(min-max) |         |
| QFFD2020R/L7-48H   | ○ | ○     |   | 20x20           | 150 | 21 | 3 | 7                 | 48-66           | Z*FD**  |
| QFFD2020R/L7-60H   | ○ | ○     |   | 20x20           | 150 | 21 | 3 | 7                 | 60-80           | Z*FD**  |
| QFFD2020R/L7-74H   | ○ | ○     |   | 20x20           | 150 | 21 | 3 | 7                 | 74-110          | Z*FD**  |
| QFFD2020R/L7-100H  | ○ | ○     |   | 20x20           | 150 | 21 | 3 | 7                 | 100-150         | Z*FD**  |
| QFFD2020R/L10-48H  | ○ | ○     |   | 20x20           | 150 | 21 | 3 | 10                | 48-66           | Z*FD**  |
| QFFD2020R/L10-60H  | ○ | ○     |   | 20x20           | 150 | 21 | 3 | 10                | 60-80           | Z*FD**  |
| QFFD2020R/L10-74H  | ○ | ○     |   | 20x20           | 150 | 21 | 3 | 10                | 74-110          | Z*FD**  |
| QFFD2020R/L10-100H | ○ | ○     |   | 20x20           | 150 | 21 | 3 | 10                | 100-150         | Z*FD**  |
| QFFD2525R/L10-48H  | ● | ●     |   | 25x25           | 150 | 26 | 3 | 10                | 48-66           | Z*FD**  |
| QFFD2525R/L10-60H  | ● | ●     |   | 25x25           | 150 | 26 | 3 | 10                | 60-80           | Z*FD**  |
| QFFD2525R/L10-74H  | ● | ●     |   | 25x25           | 150 | 26 | 3 | 10                | 74-110          | Z*FD**  |
| QFFD2525R/L10-100H | ● | ●     |   | 25x25           | 150 | 26 | 3 | 10                | 100-150         | Z*FD**  |
| QFFD2525R/L17-48H  | ● | ●     |   | 25x25           | 150 | 26 | 3 | 17                | 48-66           | Z*FD**  |
| QFFD2525R/L17-60H  | ● | ●     |   | 25x25           | 150 | 26 | 3 | 17                | 60-80           | Z*FD**  |
| QFFD2525R/L17-74H  | ● | ●     |   | 25x25           | 150 | 26 | 3 | 17                | 74-110          | Z*FD**  |
| QFFD2525R/L17-100H | ● | ●     |   | 25x25           | 150 | 26 | 3 | 17                | 100-150         | Z*FD**  |
| QFGD2020R/L10-52H  | ○ | ○     |   | 20x20           | 150 | 21 | 4 | 10                | 52-72           | Z*GD**  |
| QFGD2020R/L10-64H  | ○ | ○     |   | 20x20           | 150 | 21 | 4 | 10                | 64-100          | Z*GD**  |
| QFGD2020R/L10-90H  | ○ | ○     |   | 20x20           | 150 | 21 | 4 | 10                | 90-140          | Z*GD**  |
| QFGD2020R/L10-130H | ○ | ○     |   | 20x20           | 150 | 21 | 4 | 10                | 130-230         | Z*GD**  |
| QFGD2020R/L15-52H  | ○ | ○     |   | 20x20           | 150 | 21 | 4 | 15                | 52-72           | Z*GD**  |
| QFGD2020R/L15-64H  | ○ | ○     |   | 20x20           | 150 | 21 | 4 | 15                | 64-100          | Z*GD**  |
| QFGD2020R/L15-90H  | ○ | ○     |   | 20x20           | 150 | 21 | 4 | 15                | 90-140          | Z*GD**  |
| QFGD2020R/L15-130H | ○ | ○     |   | 20x20           | 150 | 21 | 4 | 15                | 130-230         | Z*GD**  |
| QFGD2525R/L13-52H  | ● | ●     |   | 25x25           | 150 | 26 | 4 | 13                | 52-72           | Z*GD**  |
| QFGD2525R/L13-64H  | ● | ●     |   | 25x25           | 150 | 26 | 4 | 13                | 64-100          | Z*GD**  |
| QFGD2525R/L13-90H  | ● | ●     |   | 25x25           | 150 | 26 | 4 | 13                | 90-140          | Z*GD**  |
| QFGD2525R/L13-130H | ● | ●     |   | 25x25           | 150 | 26 | 4 | 13                | 130-230         | Z*GD**  |
| QFGD2525R/L22-52H  | ● | ●     |   | 25x25           | 150 | 26 | 4 | 22                | 52-72           | Z*GD**  |
| QFGD2525R/L22-64H  | ● | ●     |   | 25x25           | 150 | 26 | 4 | 22                | 64-100          | Z*GD**  |
| QFGD2525R/L22-90H  | ● | ●     |   | 25x25           | 150 | 26 | 4 | 22                | 90-140          | Z*GD**  |
| QFGD2525R/L22-130H | ● | ●     |   | 25x25           | 150 | 26 | 4 | 22                | 130-230         | Z*GD**  |
| QFHD2525R/L13-58H  | ● | ●     |   | 25x25           | 150 | 26 | 5 | 13                | 58-96           | Z*HD**  |
| QFHD2525R/L13-86H  | ● | ●     |   | 25x25           | 150 | 26 | 5 | 13                | 86-140          | Z*HD**  |
| QFHD2525R/L13-130H | ● | ●     |   | 25x25           | 150 | 26 | 5 | 13                | 130-200         | Z*HD**  |
| QFHD2525R/L13-185H | ● | ●     |   | 25x25           | 150 | 26 | 5 | 13                | 185-400         | Z*HD**  |

Codice sistema > A422

Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456

| Articolo           | * | Stock |   | Dimensioni [mm] |     |    |   |                   |                 | Inserto                                                                             |
|--------------------|---|-------|---|-----------------|-----|----|---|-------------------|-----------------|-------------------------------------------------------------------------------------|
|                    |   | R     | L | HxB             | L   | S  | W | ar <sub>max</sub> | ØD<br>(min-max) |  |
| QFHD2523R/L16-44H  |   | ○     |   | 25x23           | 150 |    | 5 | 16                | 44-52           | Z*HD**                                                                              |
| QFHD2525R/L22-58H  |   | ●     | ● | 25x25           | 150 | 26 | 5 | 22                | 58-96           | Z*HD**                                                                              |
| QFHD2525R/L22-86H  |   | ●     | ● | 25x25           | 150 | 26 | 5 | 22                | 86-140          | Z*HD**                                                                              |
| QFHD2525R/L22-130H |   | ●     | ● | 25x25           | 150 | 26 | 5 | 22                | 130-200         | Z*HD**                                                                              |
| QFHD2525R/L22-185H |   | ●     | ● | 25x25           | 150 | 26 | 5 | 22                | 185-400         | Z*HD**                                                                              |
| QFKD2525R/L13-60H  |   | ●     | ● | 25x25           | 150 | 26 | 6 | 13                | 60-100          | Z*KD**                                                                              |
| QFKD2525R/L13-88H  |   | ○     | ● | 25x25           | 150 | 26 | 6 | 13                | 88-180          | Z*KD**                                                                              |
| QFKD2525R/L13-160H |   | ●     | ● | 25x25           | 150 | 26 | 6 | 13                | 160-400         | Z*KD**                                                                              |
| QFKD2525R/L20-45H  |   | ○     |   | 25x25           | 150 |    | 6 | 20                | 45-90           | Z*KD**                                                                              |
| QFKD2525R/L22-60H  |   | ●     | ● | 25x25           | 150 | 26 | 6 | 22                | 60-100          | Z*KD**                                                                              |
| QFKD2525R/L22-88H  |   | ●     | ● | 25x25           | 150 | 26 | 6 | 22                | 88-180          | Z*KD**                                                                              |
| QFKD2525R/L22-160H |   | ●     | ● | 25x25           | 150 | 26 | 6 | 22                | 160-400         | Z*KD**                                                                              |
| QFKD2525R/L30-88H  |   | ●     |   | 25x25           | 150 |    | 6 | 30                | 88-180          | Z*KD**                                                                              |

● In magazzino ○ Su richiesta

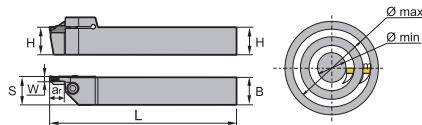
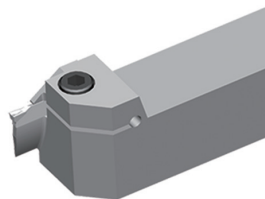
\* Con raffreddamento interno

| Parti di ricambio                                                                   |         |                           |                           |                           |                           |
|-------------------------------------------------------------------------------------|---------|---------------------------|---------------------------|---------------------------|---------------------------|
|                                                                                     | Inserto | Z*FD**                    | Z*GD**                    | Z*HD**                    | Z*KD**                    |
|                                                                                     | H       | 20-25                     | 20-25                     | 20-25                     | 20-25                     |
|   | Vite    | GB70-85-M6×20<br>(7,0 Nm) | GB70-85-M6×20<br>(7,0 Nm) | GB70-85-M6×20<br>(7,0 Nm) | GB70-85-M6×20<br>(7,0 Nm) |
|  | Chiave  | W50RL                     | W50RL                     | W50RL                     | W50RL                     |

| Inserto                                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| A399                                                                                | A400                                                                                | A404                                                                                | A407                                                                                | A410                                                                                | A411                                                                                  |

## Portautensile per scanalatura (assiale)

QF\*\*RR/LL



Versione LL

| Articolo          | * | Stock |   | Dimensioni [mm] |     |    |   |                   |                 | Inserto |
|-------------------|---|-------|---|-----------------|-----|----|---|-------------------|-----------------|---------|
|                   |   | R     | L | HxB             | L   | S  | W | ar <sub>max</sub> | ØD<br>(min-max) |         |
| QFFD2020LL10-48H  | ○ |       |   | 20x20           | 150 | 21 | 3 | 10                | 48-66           | Z*FD**  |
| QFFD2020RR10-48H  | ○ |       |   | 20x20           | 150 | 21 | 3 | 10                | 48-66           | Z*FD**  |
| QFFD2020RR10-60H  | ○ |       |   | 20x20           | 150 | 21 | 3 | 10                | 60-80           | Z*FD**  |
| QFFD2020RR10-74H  | ○ |       |   | 20x20           | 150 | 21 | 3 | 10                | 74-110          | Z*FD**  |
| QFFD2525LL10-48H  | ● |       |   | 25x25           | 150 | 26 | 3 | 10                | 48-66           | Z*FD**  |
| QFFD2525RR10-48H  | ○ |       |   | 25x25           | 150 | 26 | 3 | 10                | 48-66           | Z*FD**  |
| QFFD2525LL10-60H  | ○ |       |   | 25x25           | 150 | 26 | 3 | 10                | 60-80           | Z*FD**  |
| QFFD2525RR10-60H  | ○ |       |   | 25x25           | 150 | 26 | 3 | 10                | 60-80           | Z*FD**  |
| QFFD2525LL10-74H  | ○ |       |   | 25x25           | 150 | 26 | 3 | 10                | 74-110          | Z*FD**  |
| QFFD2525RR10-74H  | ○ |       |   | 25x25           | 150 | 26 | 3 | 10                | 74-110          | Z*FD**  |
| QFFD2525LL10-100H | ○ |       |   | 25x25           | 150 | 26 | 3 | 10                | 100-150         | Z*FD**  |
| QFFD2525RR10-100H | ○ |       |   | 25x25           | 150 | 26 | 3 | 10                | 100-150         | Z*FD**  |
| QFFD2525LL17-48H  | ● |       |   | 25x25           | 150 | 26 | 3 | 17                | 48-66           | Z*FD**  |
| QFFD2525RR17-48H  | ○ |       |   | 25x25           | 150 | 26 | 3 | 17                | 48-66           | Z*FD**  |
| QFFD2525LL17-60H  | ○ |       |   | 25x25           | 150 | 26 | 3 | 17                | 60-80           | Z*FD**  |
| QFFD2525RR17-60H  | ○ |       |   | 25x25           | 150 | 26 | 3 | 17                | 60-80           | Z*FD**  |
| QFFD2525LL17-74H  | ○ |       |   | 25x25           | 150 | 26 | 3 | 17                | 74-110          | Z*FD**  |
| QFFD2525RR17-74H  | ○ |       |   | 25x25           | 150 | 26 | 3 | 17                | 74-110          | Z*FD**  |
| QFFD2525LL17-100H | ○ |       |   | 25x25           | 150 | 26 | 3 | 17                | 100-150         | Z*FD**  |
| QFFD2525RR17-100H | ○ |       |   | 25x25           | 150 | 26 | 3 | 17                | 100-150         | Z*FD**  |
| QFGD2020LL10-52H  | ○ |       |   | 20x20           | 150 | 21 | 4 | 10                | 52-72           | Z*GD**  |
| QFGD2020RR10-52H  | ○ |       |   | 20x20           | 150 | 21 | 4 | 10                | 52-72           | Z*GD**  |
| QFGD2020LL15-52H  | ○ |       |   | 20x20           | 150 | 26 | 4 | 15                | 52-72           | Z*GD**  |
| QFGD2020RR15-52H  | ○ |       |   | 20x20           | 150 | 26 | 4 | 15                | 52-72           | Z*GD**  |
| QFGD2020LL15-90H  | ○ |       |   | 20x20           | 150 | 26 | 4 | 15                | 90-140          | Z*GD**  |
| QFGD2020RR15-90H  | ○ |       |   | 20x20           | 150 | 26 | 4 | 15                | 90-140          | Z*GD**  |
| QFGD2020RR15-130H | ○ |       |   | 20x20           | 150 | 26 | 4 | 15                | 130-230         | Z*GD**  |
| QFGD2525RR13-52H  | ● |       |   | 25x25           | 150 | 21 | 4 | 13                | 52-72           | Z*GD**  |
| QFGD2525LL13-64H  | ● |       |   | 25x25           | 150 | 21 | 4 | 13                | 64-100          | Z*GD**  |
| QFGD2525RR13-64H  | ○ |       |   | 25x25           | 150 | 21 | 4 | 13                | 64-100          | Z*GD**  |
| QFGD2525LL13-130H | ● |       |   | 25x25           | 150 | 26 | 4 | 13                | 130-230         | Z*GD**  |
| QFGD2525RR13-130H | ○ |       |   | 25x25           | 150 | 21 | 4 | 13                | 130-230         | Z*GD**  |
| QFGD2525LL22-52H  | ○ |       |   | 25x25           | 150 | 26 | 4 | 22                | 52-72           | Z*GD**  |
| QFGD2525RR22-52H  | ○ |       |   | 25x25           | 150 | 26 | 4 | 22                | 52-72           | Z*GD**  |
| QFGD2525LL22-64H  | ○ |       |   | 25x25           | 150 | 26 | 4 | 22                | 64-100          | Z*GD**  |

Codice sistema > A422

Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456



| Articolo          | * | Stock |   | Dimensioni [mm] |     |    |   |                   |                 | Inserto                                                                             |
|-------------------|---|-------|---|-----------------|-----|----|---|-------------------|-----------------|-------------------------------------------------------------------------------------|
|                   |   | R     | L | HxB             | L   | S  | W | ar <sub>max</sub> | ØD<br>(min-max) |  |
| QFGD2525RR22-64H  | ○ |       |   | 25x25           | 150 | 26 | 4 | 22                | 64-100          | Z*GD**                                                                              |
| QFGD2525LL22-90H  | ○ |       |   | 25x25           | 150 | 26 | 4 | 22                | 90-140          | Z*GD**                                                                              |
| QFGD2525RR22-90H  | ○ |       |   | 25x25           | 150 | 26 | 4 | 22                | 90-140          | Z*GD**                                                                              |
| QFGD2525LL22-130H | ○ |       |   | 25x25           | 150 | 26 | 4 | 22                | 130-230         | Z*GD**                                                                              |
| QFGD2525RR22-130H | ● |       |   | 25x25           | 150 | 26 | 4 | 22                | 130-230         | Z*GD**                                                                              |
| QFHD2525LL13-130H | ○ |       |   | 25x25           | 150 | 26 | 5 | 13                | 130-200         | Z*HD**                                                                              |
| QFHD2525RR13-130H | ○ |       |   | 25x25           | 150 | 26 | 5 | 13                | 130-200         | Z*HD**                                                                              |
| QFHD2525RR13-185H | ○ |       |   | 25x25           | 150 | 26 | 5 | 13                | 185-400         | Z*HD**                                                                              |
| QFHD2525LL22-58H  | ● |       |   | 25x25           | 150 | 26 | 5 | 22                | 58-96           | Z*HD**                                                                              |
| QFHD2525RR22-58H  | ● |       |   | 25x25           | 150 | 26 | 5 | 22                | 58-96           | Z*HD**                                                                              |
| QFHD2525RR22-86H  | ○ |       |   | 25x25           | 150 | 26 | 5 | 22                | 86-140          | Z*HD**                                                                              |
| QFHD2525LL22-130H | ○ |       |   | 25x25           | 150 | 26 | 5 | 22                | 130-200         | Z*HD**                                                                              |
| QFHD2525RR22-130H | ● |       |   | 25x25           | 150 | 26 | 5 | 22                | 130-200         | Z*HD**                                                                              |
| QFHD2525LL22-185H | ○ |       |   | 25x25           | 150 | 26 | 5 | 22                | 185-400         | Z*HD**                                                                              |
| QFHD2525RR22-185H | ○ |       |   | 25x25           | 150 | 26 | 5 | 22                | 185-400         | Z*HD**                                                                              |
| QFKD2525RR13-60H  | ○ |       |   | 25x25           | 150 | 26 | 6 | 13                | 60-100          | Z*KD**                                                                              |
| QFKD2525RR13-88H  | ○ |       |   | 25x25           | 150 | 26 | 6 | 13                | 88-180          | Z*KD**                                                                              |
| QFKD2525RR15-50H  | ○ |       |   | 25x25           | 150 |    | 6 | 15                | 50-100          | Z*KD**                                                                              |
| QFKD2525RR22-60H  | ○ |       |   | 25x25           | 150 | 26 | 6 | 22                | 60-100          | Z*KD**                                                                              |
| QFKD2525LL22-88H  | ○ |       |   | 25x25           | 150 | 26 | 6 | 22                | 88-180          | Z*KD**                                                                              |
| QFKD2525RR22-88H  | ○ |       |   | 25x25           | 150 | 26 | 6 | 22                | 88-180          | Z*KD**                                                                              |
| QFKD2525LL22-160H | ● |       |   | 25x25           | 150 | 26 | 6 | 22                | 160-400         | Z*KD**                                                                              |
| QFKD2525RR22-160H | ○ |       |   | 25x25           | 150 | 26 | 6 | 22                | 160-400         | Z*KD**                                                                              |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|                                                                                     | Inserto | Z*FD**                    | Z*GD**                    | Z*HD**                    | Z*KD**                    |
|-------------------------------------------------------------------------------------|---------|---------------------------|---------------------------|---------------------------|---------------------------|
|                                                                                     | H       | 20-25                     | 20-25                     | 20-25                     | 20-25                     |
|  | Vite    | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) |
|  | Chiave  | W50RL                     | W50RL                     | W50RL                     | W50RL                     |

## Inserto

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| A399                                                                                | A400                                                                                | A404                                                                                | A407                                                                                | A410                                                                                | A411                                                                                  |

Codice sistema &gt; A422

Scelta gradi &gt; A394

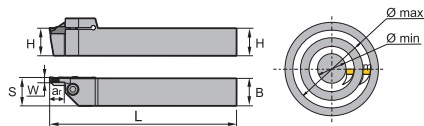
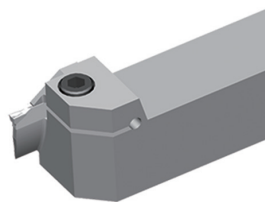
Informazioni tecniche &gt; A501

Dati di taglio &gt; A456



## Portautensile per scanalatura (assiale)

QF\*SRR/LL



Versione LL

| Articolo          | * | Stock |   | Dimensioni [mm] |     |    |   |                   |                 | Inserto |
|-------------------|---|-------|---|-----------------|-----|----|---|-------------------|-----------------|---------|
|                   |   | R     | L | HxB             | L   | S  | W | ar <sub>max</sub> | ØD<br>(min-max) |         |
| QFHS2525LL30-185H | ● |       |   | 25x25           | 150 | 26 | 5 | 30                | 185-400         | Z*HS**  |
| QFHS2525RR30-185H | ○ |       |   | 25x25           | 150 | 26 | 5 | 30                | 185-400         | Z*HS**  |
| QFKS2525RR30-160H | ○ |       |   | 25x25           | 150 | 26 | 6 | 30                | 160-400         | Z*KS**  |
| QFKS2525LL30-160H | ○ |       |   | 25x25           | 150 | 26 | 6 | 30                | 160-400         | ZT*S**  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

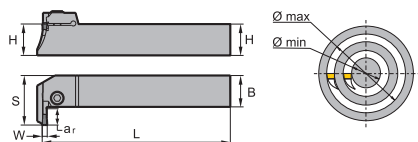
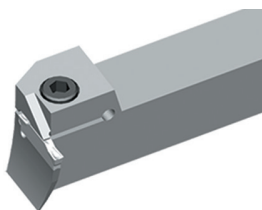
|  | Inserto | Z*HS**                    | Z*KS**                    | ZT*S**                    |
|--|---------|---------------------------|---------------------------|---------------------------|
|  | H       | 25                        | 25                        | 25                        |
|  | Vite    | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) |
|  | Chiave  | W50RL                     | W50RL                     | W50RL                     |

### Inserto

|      |      |      |
|------|------|------|
|      |      |      |
| A402 | A405 | A406 |

## Portautensile per scanalatura (assiale)

QF\*DR/L



Versione destra

| Articolo           | *   | Stock |   | Dimensioni [mm] |     |      |   |                   |                 | Inserto |
|--------------------|-----|-------|---|-----------------|-----|------|---|-------------------|-----------------|---------|
|                    |     | R     | L | HxB             | L   | S    | W | ar <sub>max</sub> | ØD<br>(min-max) |         |
| QFFD2020R/L10-48L  | ○ ○ |       |   | 20x20           | 150 | 31,5 | 3 | 10                | 48-66           | Z*FD**  |
| QFGD2020R/L10-52L  | ○ ○ |       |   | 20x20           | 150 | 31,5 | 4 | 10                | 52-72           | Z*GD**  |
| QFFD2020R/L10-74L  | ● ○ |       |   | 20x20           | 150 | 31,5 | 3 | 10                | 74-110          | Z*FD**  |
| QFGD2020R/L10-90L  | ● ○ |       |   | 20x20           | 150 | 31,5 | 4 | 10                | 90-140          | Z*GD**  |
| QFFD2020R/L10-100L | ○ ○ |       |   | 20x20           | 150 | 31,5 | 3 | 10                | 100-150         | Z*FD**  |
| QFGD2020R/L15-52L  | ○ ○ |       |   | 20x20           | 150 | 36,5 | 4 | 15                | 52-72           | Z*GD**  |
| QFFD2525R/L10-48L  | ● ● |       |   | 25x25           | 150 | 36,5 | 3 | 10                | 48-66           | Z*FD**  |
| QFFD2525R/L10-60L  | ● ○ |       |   | 25x25           | 150 | 36,5 | 3 | 10                | 60-80           | Z*FD**  |
| QFFD2525R/L10-74L  | ○ ○ |       |   | 25x25           | 150 | 36,5 | 3 | 10                | 74-110          | Z*FD**  |
| QFFD2525R/L10-100L | ○ ○ |       |   | 25x25           | 150 | 36,5 | 3 | 10                | 100-150         | Z*FD**  |
| QFGD2525R/L13-52L  | ○ ○ |       |   | 25x25           | 150 | 39,5 | 4 | 13                | 52-72           | Z*GD**  |
| QFKD2525R/L13-60L  | ○ ○ |       |   | 25x25           | 150 | 39,5 | 6 | 13                | 60-100          | Z*KD**  |
| QFGD2525R/L13-64L  | ○ ● |       |   | 25x25           | 150 | 39,5 | 4 | 13                | 64-100          | Z*GD**  |
| QFGD2525R/L13-90L  | ○ ○ |       |   | 25x25           | 150 | 39,5 | 4 | 13                | 90-140          | Z*GD**  |
| QFGD2525R/L13-130L | ○ ○ |       |   | 25x25           | 150 | 39,5 | 4 | 13                | 130-230         | Z*GD**  |
| QFFD2525R/L17-48L  | ○ ○ |       |   | 25x25           | 150 | 43,5 | 3 | 17                | 48-66           | Z*FD**  |
| QFFD2525R/L17-60L  | ○ ○ |       |   | 25x25           | 150 | 43,5 | 3 | 17                | 60-80           | Z*FD**  |
| QFFD2525R/L17-74L  | ○ ○ |       |   | 25x25           | 150 | 43,5 | 3 | 17                | 74-110          | Z*FD**  |
| QFFD2525R/L17-100L | ● ○ |       |   | 25x25           | 150 | 43,5 | 3 | 17                | 100-150         | Z*FD**  |
| QFGD2525R/L22-52L  | ○ ○ |       |   | 25x25           | 150 | 48,5 | 4 | 22                | 52-72           | Z*GD**  |
| QFKD2525R/L22-60L  | ○ ● |       |   | 25x25           | 150 | 48,5 | 6 | 22                | 60-100          | Z*KD**  |
| QFGD2525R/L22-64L  | ○ ○ |       |   | 25x25           | 150 | 48,5 | 4 | 22                | 64-100          | Z*GD**  |
| QFKD2525R/L22-88L  | ○ ● |       |   | 25x25           | 150 | 48,5 | 6 | 22                | 88-180          | Z*KD**  |
| QFGD2525R/L22-90L  | ○ ○ |       |   | 25x25           | 150 | 48,5 | 4 | 22                | 90-140          | Z*GD**  |
| QFGD2525R/L22-130L | ● ○ |       |   | 25x25           | 150 | 48,5 | 4 | 22                | 130-230         | Z*GD**  |
| QFFD2020R/L7-74L   | ○   |       |   | 20x20           | 150 | 28,5 | 3 | 7                 | 74-110          | Z*FD**  |
| QFFD2020R/L10-60L  | ●   |       |   | 20x20           | 150 | 31,5 | 3 | 10                | 60-80           | Z*FD**  |
| QFGD2020R/L10-130L | ●   |       |   | 20x20           | 150 | 31,5 | 4 | 10                | 130-230         | Z*GD**  |
| QFGD2020R/L15-64L  | ○   |       |   | 20x20           | 150 | 36,5 | 4 | 15                | 64-100          | Z*GD**  |
| QFGD2020R/L15-90L  | ○   |       |   | 20x20           | 150 | 36,5 | 4 | 15                | 90-140          | Z*GD**  |
| QFGD2020R/L15-130L | ○   |       |   | 20x20           | 150 | 36,5 | 4 | 15                | 130-230         | Z*GD**  |
| QFHD2525R/L13-58L  | ○   |       |   | 25x25           | 150 | 39,5 | 5 | 13                | 58-96           | Z*HD**  |
| QFHD2525R/L13-86L  | ●   |       |   | 25x25           | 150 | 39,5 | 5 | 13                | 86-140          | Z*HD**  |
| QFHD2525R/L13-130L | ○ ○ |       |   | 25x25           | 150 | 39,5 | 5 | 13                | 130-200         | Z*HD**  |
| QFHD2525R/L13-185L | ○   |       |   | 25x25           | 150 | 39,5 | 5 | 13                | 185-400         | Z*HD**  |
| QFHD2525R/L22-58L  | ○ ○ |       |   | 25x25           | 150 | 48,5 | 5 | 22                | 58-96           | Z*HD**  |

Codice sistema &gt; A422

Scelta gradi &gt; A394

Informazioni tecniche &gt; A501

Dati di taglio &gt; A456

**A**

Tornitura

| Articolo           | * | Stock |   | Dimensioni [mm] |     |      |   |                   |                 | Inserto<br> |
|--------------------|---|-------|---|-----------------|-----|------|---|-------------------|-----------------|------------------------------------------------------------------------------------------------|
|                    |   | R     | L | HxB             | L   | S    | W | ar <sub>max</sub> | ØD<br>(min-max) |                                                                                                |
| QFHD2525R/L22-86L  |   | ○     | ○ | 25x25           | 150 | 48,5 | 5 | 22                | 86-140          | Z*HD**                                                                                         |
| QFHD2525R/L22-130L |   | ○     | ○ | 25x25           | 150 | 48,5 | 5 | 22                | 130-200         | Z*HD**                                                                                         |
| QFHD2525R/L22-185L |   | ○     | ○ | 25x25           | 150 | 48,5 | 5 | 22                | 185-400         | Z*HD**                                                                                         |
| QFKD2525R/L13-88L  |   |       | ○ | 25x25           | 150 | 39,5 | 6 | 13                | 88-180          | Z*KD**                                                                                         |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

**B**

Fresatura

| Parti di ricambio                                                                 |         |                           |                           |                           |                           |
|-----------------------------------------------------------------------------------|---------|---------------------------|---------------------------|---------------------------|---------------------------|
|                                                                                   | Inserto | Z*FD**                    | Z*GD**                    | Z*HD**                    | Z*KD**                    |
|                                                                                   | H       | 20-25                     | 20-25                     | 20-25                     | 20-25                     |
|  | Vite    | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) |
|  | Chiave  | W50RL                     | W50RL                     | W50RL                     | W50RL                     |

**C**

Foratura

| Inserto                                                                           |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| A399                                                                              | A400                                                                              | A404                                                                              | A407                                                                              | A410                                                                               | A411                                                                                |

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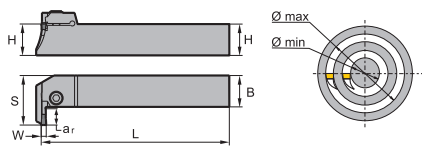
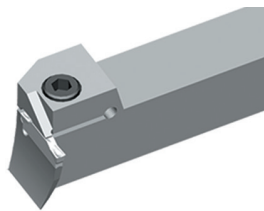
Scelta gradi &gt; A394

Informazioni tecniche &gt; A501

Dati di taglio &gt; A456

Portautensile per scanalatura (assiale)

QFHSDR/L



Versione destra

| Articolo           | * | Stock |   | Dimensioni [mm] |     |      |   |                   |                 | Inserto                                                                             |
|--------------------|---|-------|---|-----------------|-----|------|---|-------------------|-----------------|-------------------------------------------------------------------------------------|
|                    |   | R     | L | HxB             | L   | S    | W | ar <sub>max</sub> | ØD<br>(min-max) |  |
| QFHS2525R/L30-185L |   | ○     | ○ | 25x25           | 150 | 56,5 | 5 | 30                | 185-400         | Z*HS**                                                                              |

● In magazzino   ○ Su richiesta  
\* Con raffreddamento interno

| Parti di ricambio                                                                   |         |                           |
|-------------------------------------------------------------------------------------|---------|---------------------------|
|                                                                                     | Inserto | Z*HS**                    |
|                                                                                     | H       | 25                        |
|   | Vite    | GB70-85-M6x20<br>(7,0 Nm) |
|  | Chiave  | W50RL                     |

| Inserto                                                                             |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |
| A402                                                                                | A405                                                                                | A406                                                                                |

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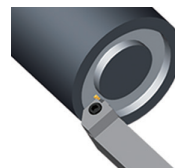
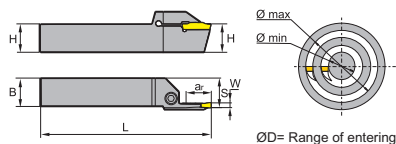
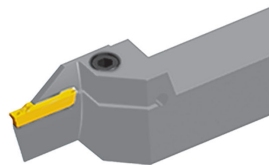
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## Portautensile per scanalatura (assiale)

QF\*\*R/L



Versione sinistra

| Articolo           | * | Stock |   | Dimensioni [mm] |     |    |   |                   |                 | Inserto |
|--------------------|---|-------|---|-----------------|-----|----|---|-------------------|-----------------|---------|
|                    |   | R     | L | HxB             | L   | S  | W | ar <sub>max</sub> | ØD<br>(min-max) |         |
| QFHS2525R/L30-185H | ● | ●     |   | 25x25           | 150 | 26 | 5 | 30                | 185-400         | Z*HS**  |
| QFKS2525R/L30-160H | ● | ●     |   | 25x25           | 150 | 26 | 6 | 30                | 160-400         | Z*KS**  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

### Parti di ricambio

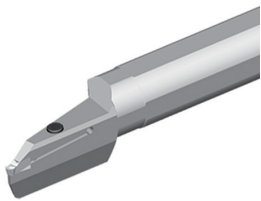
|  | Inserto | Z*HS**                    | Z*KS**                    |
|--|---------|---------------------------|---------------------------|
|  | H       | 25                        | 25                        |
|  | Vite    | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) |
|  | Chiave  | W50RL                     | W50RL                     |

### Inserto

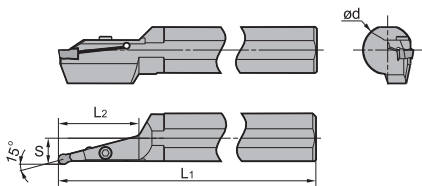
|      |      |      |
|------|------|------|
|      |      |      |
| A402 | A405 | A406 |

Portautensile per scanalatura

Q\*DR/L



Versione destra



| Articolo          | * | Stock |   | Dimensioni [mm] |    |    |                |                | Inserto |
|-------------------|---|-------|---|-----------------|----|----|----------------|----------------|---------|
|                   |   | R     | L | ØD              | ød | S  | L <sub>1</sub> | L <sub>2</sub> |         |
| C40X-QKDR/L60-15A |   | ○     | ○ | 160             | 40 | 20 | 320            | 60             | Z*KD**  |
| C40X-QKDR/L75-15A |   | ●     | ○ | 160             | 40 | 20 | 320            | 75             | Z*KD**  |
| C40X-QLDR/L65-15A |   | ○     | ○ | 160             | 40 | 21 | 320            | 65             | Z*LD**  |
| C40X-QLDR/L80-15A |   | ○     | ○ | 160             | 40 | 21 | 320            | 80             | Z*LD**  |

● In magazzino    ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |         |                           |                           |
|-------------------|---------|---------------------------|---------------------------|
|                   | Inserto | Z*KD**                    | Z*LD**                    |
|                   | ød      | 32-40                     | 32-40                     |
|                   | Vite    | GB70-85-M6×20<br>(7,0 Nm) | GB70-85-M6×20<br>(7,0 Nm) |
|                   | Chiave  | WH50L                     | WH50L                     |

| Inserto |      |      |
|---------|------|------|
|         |      |      |
| A410    | A411 | A414 |

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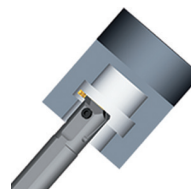
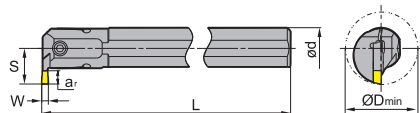
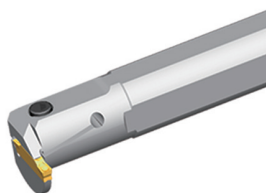
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## Portautensile per scanalatura (interna)

Q\*DR/L



| Articolo         | * | Stock |   | Dimensioni [mm] |    |     |   |     |                   | Inserto |
|------------------|---|-------|---|-----------------|----|-----|---|-----|-------------------|---------|
|                  |   | R     | L | ØDmin           | Ød | L   | S | W   | ar <sub>max</sub> |         |
| C16M-QBDR/L04-20 |   | ●     | ○ | 20              | 16 | 150 |   | 2   | 4                 | Z*BD**  |
| C20Q-QEDR/L05-27 |   | ●     | ● | 27              | 20 | 180 |   | 2,5 | 5                 | Z*ED**  |
| C25R-QEDR/L07-33 |   | ●     | ● | 33              | 25 | 200 |   | 2,5 | 7                 | Z*ED**  |
| C32S-QEDR/L09-42 |   | ●     | ● | 42              | 32 | 250 |   | 2,5 | 9                 | Z*ED**  |
| C20Q-QFDR/L05-27 |   | ●     | ● | 27              | 20 | 0   |   | 3   | 5                 | Z*FD**  |
| C25R-QFDR/L07-33 |   | ●     | ● | 33              | 25 | 200 |   | 3   | 7                 | Z*FD**  |
| C32S-QFDR/L09-42 |   | ●     | ● | 42              | 32 | 250 |   | 3   | 9                 | Z*FD**  |
| C25R-QGDR/L08-35 |   | ●     | ● | 35              | 25 | 200 |   | 4   | 8                 | Z*GD**  |
| C32S-QGDR/L11-44 |   | ●     | ● | 44              | 32 | 250 |   | 4   | 11                | Z*GD**  |
| C40T-QGDR/L13-54 |   | ●     | ● | 5               | 40 | 300 |   | 4   | 13                | Z*GD**  |
| C25R-QHDR/L08-35 |   | ●     | ● | 35              | 25 | 200 |   | 5   | 8                 | Z*HD**  |
| C32S-QHDR/L11-44 |   | ●     | ● | 44              | 32 | 250 |   | 5   | 11                | Z*HD**  |
| C40T-QHDR/L13-54 |   | ●     | ● | 54              | 40 | 300 |   | 5   | 13                | Z*HD**  |
| C25R-QKDR/L08-35 |   | ○     | ● | 35              | 25 | 200 |   | 6   | 8                 | Z*KD**  |
| C32S-QKDR/L11-44 |   | ●     | ● | 44              | 32 | 250 |   | 6   | 11                | Z*KD**  |
| C40T-QKDR/L13-54 |   | ●     | ● | 54              | 40 | 300 |   | 6   | 13                | Z*KD**  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |         |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
|-------------------|---------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|                   | Inserto | Z*BD**                 | Z*ED**                 | Z*ED**                 | Z*ED**                 | Z*FD**                 | Z*FD**                 | Z*FD**                 | Z*GD**                 | Z*GD**                 | Z*HD**                 | Z*HD**                 | Z*KD**                 | Z*KD**                 |
|                   | Ød      | 16                     | 20                     | 25                     | 32-40                  | 20                     | 25                     | 32-40                  | 25                     | 32-40                  | 25                     | 32-40                  | 25                     | 32-40                  |
|                   | Vite    | GB70-85-M5x10 (4,0 Nm) | GB70-85-M4x12 (2,6 Nm) | GB70-85-M5x16 (4,0 Nm) | GB70-85-M6x20 (7,0 Nm) | GB70-85-M4x12 (2,6 Nm) | GB70-85-M5x16 (4,0 Nm) | GB70-85-M6x20 (7,0 Nm) | GB70-85-M5x16 (4,0 Nm) | GB70-85-M6x20 (7,0 Nm) | GB70-85-M5x16 (4,0 Nm) | GB70-85-M6x20 (7,0 Nm) | GB70-85-M5x16 (4,0 Nm) | GB70-85-M6x20 (7,0 Nm) |
|                   | Chiave  | WH40L                  | WH30L                  | WH40L                  | WH50L                  | WH30L                  | WH40L                  | WH50L                  | WH40L                  | WH50L                  | WH40L                  | WH50L                  | WH40L                  | WH50L                  |

Codice sistema > A422

Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456



Portautensile per scanalatura (interna)

| Inserto                                                                           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| A399                                                                              | A400                                                                              | A404                                                                              | A407                                                                              | A410                                                                              | A411                                                                                | A414                                                                                |

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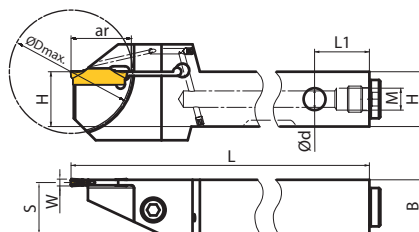
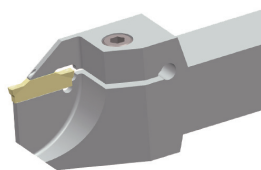
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## Portautensile per scanalatura (esterna)

QE\*\*R/L-DGC



| Articolo          |    | Stock |   | Dimensioni [mm] |      |     |       |                |     |                   |       |      |                                                                                     | Inserto |  |
|-------------------|-------------------------------------------------------------------------------------|-------|---|-----------------|------|-----|-------|----------------|-----|-------------------|-------|------|-------------------------------------------------------------------------------------|---------|--|
|                   |                                                                                     | R     | L | HxB             | ød   | L   | S     | L <sub>1</sub> | W   | ar <sub>max</sub> | ØDmax | M    |  |         |  |
| QEBD1616R/L20-DGC |    | ○     | ○ | 16x16           | G1/8 | 96  | 15    | 20             | 2   | 20                | 40    | G1/8 | Z*BD**                                                                              |         |  |
| QEBD1616R/L30-DGC |    | ●     | ● | 16x16           | G1/8 | 105 | 15    | 20             | 2   | 30                | 60    | G1/8 | Z*BD**                                                                              |         |  |
| QEBD2020R/L20-DGC |    | ○     | ○ | 20x20           | G1/8 | 111 | 19    | 20             | 2   | 20                | 40    | G1/8 | Z*BD**                                                                              |         |  |
| QEBD2020R/L30-DGC |    | ●     | ● | 20x20           | G1/8 | 120 | 19    | 20             | 2   | 30                | 60    | G1/8 | Z*BD**                                                                              |         |  |
| QEBD2525R/L20-DGC |    | ○     | ○ | 25x25           | G1/8 | 126 | 24    | 20             | 2   | 20                | 40    | G1/8 | Z*BD**                                                                              |         |  |
| QEBD2525R/L30-DGC |    | ●     | ● | 25x25           | G1/8 | 135 | 24    | 20             | 2   | 30                | 60    | G1/8 | Z*BD**                                                                              |         |  |
| QEED1616R/L20-DGC |   | ○     | ○ | 16x16           | G1/8 | 96  | 14,75 | 20             | 2,5 | 20                | 40    | G1/8 | Z*ED**                                                                              |         |  |
| QEED1616R/L30-DGC |  | ●     | ● | 16x16           | G1/8 | 105 | 14,75 | 20             | 2,5 | 30                | 60    | G1/8 | Z*ED**                                                                              |         |  |
| QEED2020R/L20-DGC |  | ○     | ○ | 20x20           | G1/8 | 111 | 18,75 | 20             | 2,5 | 20                | 40    | G1/8 | Z*ED**                                                                              |         |  |
| QEED2020R/L30-DGC |  | ●     | ○ | 20x20           | G1/8 | 120 | 18,75 | 20             | 2,5 | 30                | 60    | G1/8 | Z*ED**                                                                              |         |  |
| QEED2525R/L20-DGC |  | ○     | ○ | 25x25           | G1/8 | 126 | 23,75 | 20             | 2,5 | 20                | 40    | G1/8 | Z*ED**                                                                              |         |  |
| QEED2525R/L30-DGC |  | ○     | ○ | 25x25           | G1/8 | 135 | 23,75 | 20             | 2,5 | 30                | 60    | G1/8 | Z*ED**                                                                              |         |  |
| QEFD1616R/L20-DGC |  | ○     | ○ | 16x16           | G1/8 | 96  | 14,5  | 20             | 3   | 20                | 40    | G1/8 | Z*FD**                                                                              |         |  |
| QEFD1616R/L30-DGC |  | ●     | ● | 16x16           | G1/8 | 105 | 14,5  | 20             | 3   | 30                | 60    | G1/8 | Z*FD**                                                                              |         |  |
| QEFD2020R/L20-DGC |  | ○     | ○ | 20x20           | G1/8 | 111 | 18,5  | 20             | 3   | 20                | 40    | G1/8 | Z*FD**                                                                              |         |  |
| QEFD2020R/L30-DGC |  | ●     | ● | 20x20           | G1/8 | 120 | 18,5  | 20             | 3   | 30                | 60    | G1/8 | Z*FD**                                                                              |         |  |
| QEFD2525R/L20-DGC |  | ○     | ○ | 25x25           | G1/8 | 126 | 23,5  | 20             | 3   | 20                | 40    | G1/8 | Z*FD**                                                                              |         |  |
| QEFD2525R/L30-DGC |  | ○     | ○ | 25x25           | G1/8 | 135 | 23,5  | 20             | 3   | 30                | 60    | G1/8 | Z*FD**                                                                              |         |  |
| QEGD1616R/L20-DGC |  | ○     | ○ | 16x16           | G1/8 | 96  | 14    | 20             | 4   | 20                | 40    | G1/8 | Z*GD**                                                                              |         |  |
| QEGD1616R/L30-DGC |  | ●     | ● | 16x16           | G1/8 | 105 | 14    | 20             | 4   | 30                | 60    | G1/8 | Z*GD**                                                                              |         |  |
| QEGD2020R/L20-DGC |  | ○     | ○ | 20x20           | G1/8 | 111 | 18    | 20             | 4   | 20                | 40    | G1/8 | Z*GD**                                                                              |         |  |
| QEGD2020R/L30-DGC |  | ○     | ○ | 20x20           | G1/8 | 120 | 18    | 20             | 4   | 30                | 60    | G1/8 | Z*GD**                                                                              |         |  |
| QEGD2525R/L20-DGC |  | ○     | ○ | 25x25           | G1/8 | 126 | 23    | 20             | 4   | 20                | 40    | G1/8 | Z*GD**                                                                              |         |  |
| QEGD2525R/L30-DGC |  | ○     | ○ | 25x25           | G1/8 | 135 | 23    | 20             | 4   | 30                | 60    | G1/8 | Z*GD**                                                                              |         |  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                  |                           |                           |                           |                           |
|-------------------|------------------|---------------------------|---------------------------|---------------------------|---------------------------|
|                   | Inserto          | Z*BD**                    | Z*ED**                    | Z*FD**                    | Z*GD**                    |
|                   | H                | 16-25                     | 16-25                     | 16-25                     | 20-25                     |
|                   | Vita senza testa | PT1/8x4                   | PT1/8x4                   | PT1/8x4                   | PT1/8x4                   |
|                   | Vite             | GB70-85-M5x20<br>(4,0 Nm) | GB70-85-M5x20<br>(4,0 Nm) | GB70-85-M5x20<br>(4,0 Nm) | GB70-85-M5x20<br>(4,0 Nm) |
|                   | Chiave           | WH40L                     | WH40L                     | WH40L                     | WH40L                     |
|                   | Chiave           | WH50L                     | WH50L                     | WH50L                     | WH50L                     |

Codice sistema > A422

Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456

**Portautensile per scanalatura (esterna)**

| Inserto                                                                           |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |  |
| A399                                                                              | A400                                                                              | A404                                                                              | A407                                                                              |

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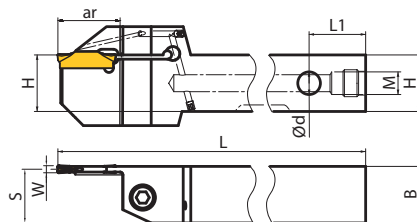
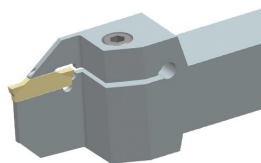
Scelta gradi &gt; A394

Informazioni tecniche &gt; A501

Dati di taglio &gt; A456

## Portautensile per scanalatura (esterna)

QE\*\*R/L-DGSC



| Articolo           | * | Stock |   | Dimensioni [mm] |      |     |       |                |     |                   |      | Inserto |
|--------------------|---|-------|---|-----------------|------|-----|-------|----------------|-----|-------------------|------|---------|
|                    |   | R     | L | HxB             | ød   | L   | S     | L <sub>1</sub> | W   | ar <sub>max</sub> | M    |         |
| QEED1616R/L30-DGSC | * | ●     | ● | 16x16           | G1/8 | 105 | 14,75 | 20             | 2,5 | 30                | G1/8 | Z*ED**  |
| QEED2020R/L30-DGSC | * | ●     | ○ | 20x20           | G1/8 | 120 | 18,75 | 20             | 2,5 | 30                | G1/8 | Z*ED**  |
| QEED2525R/L30-DGSC | * | ○     | ○ | 25x25           | G1/8 | 135 | 23,75 | 20             | 2,5 | 30                | G1/8 | Z*ED**  |
| QEFD1616R/L30-DGSC | * | ●     | ● | 16x16           | G1/8 | 105 | 14,5  | 20             | 3   | 30                | G1/8 | Z*FD**  |
| QEFD2020R/L30-DGSC | * | ○     | ○ | 20x20           | G1/8 | 120 | 18,5  | 20             | 3   | 30                | G1/8 | Z*FD**  |
| QEFD2525R/L30-DGSC | * | ○     | ○ | 25x25           | G1/8 | 135 | 23,5  | 20             | 3   | 30                | G1/8 | Z*FD**  |
| QEGD1616R/L30-DGSC | * | ○     | ○ | 16x16           | G1/8 | 105 | 14    | 20             | 4   | 30                | G1/8 | Z*GD**  |
| QEGD2020R/L30-DGSC | * | ○     | ○ | 20x20           | G1/8 | 120 | 18    | 20             | 4   | 30                | G1/8 | Z*GD**  |
| QEGD2525R/L30-DGSC | * | ○     | ○ | 25x25           | G1/8 | 135 | 23    | 20             | 4   | 30                | G1/8 | Z*GD**  |
| QEHD2525R/L30-DGSC | * | ○     | ○ | 25x25           | G1/8 | 135 | 22,5  | 20             | 5   | 30                | G1/8 | Z*HD**  |
| QEKD2525R/L30-DGSC | * | ○     | ○ | 25x25           | G1/8 | 135 | 22    | 20             | 6   | 30                | G1/8 | Z*KD**  |

● In magazzino ○ Su richiesta

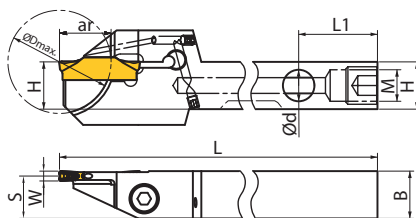
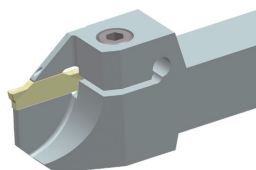
\* Con raffreddamento interno

| Parti di ricambio |                  |                           |                           |                           |                           |                           |
|-------------------|------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
|                   | Inserto<br>H     | Z*ED**<br>16-25           | Z*FD**<br>16-25           | Z*GD**<br>20-25           | Z*HD**<br>20-25           | Z*KD**<br>20-25           |
|                   | Vita senza testa | PT1/8x4                   | PT1/8x4                   | PT1/8x4                   | PT1/8x4                   | PT1/8x4                   |
|                   | Vite             | GB70-85-M5x20<br>(4,0 Nm) | GB70-85-M5x20<br>(4,0 Nm) | GB70-85-M5x20<br>(4,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) | GB70-85-M6x20<br>(7,0 Nm) |
|                   | Chiave           | WH40L                     | WH40L                     | WH40L                     | WH50L                     | WH50L                     |
|                   | Chiave           | WH50L                     | WH50L                     | WH50L                     | WH50L                     | WH50L                     |

| Inserto |      |      |      |
|---------|------|------|------|
|         |      |      |      |
| A399    | A400 | A404 | A407 |

## Portautensile per scanalatura (esterna)

QE\*\*R/L-SC



| Articolo         | ✱ | Stock |   | Dimensioni [mm] |       |     |       |                |     |                   |       |       |                                                                                     | Inserto |  |
|------------------|---|-------|---|-----------------|-------|-----|-------|----------------|-----|-------------------|-------|-------|-------------------------------------------------------------------------------------|---------|--|
|                  |   | R     | L | HxB             | ød    | L   | S     | L <sub>1</sub> | W   | ar <sub>max</sub> | ØDmax | M     |  |         |  |
| QEAD1010R/L10-SC | ✱ | ○     | ○ | 10x10           | G1/16 | 125 | 9     | 20             | 1,5 | 10                | 20    | G1/16 | Z*AD**                                                                              |         |  |
| QEAD1212R/L13-SC | ✱ | ○     | ○ | 12x12           | G1/8  | 125 | 12    | 20             | 1,5 | 13                | 26    | G1/8  | Z*AD**                                                                              |         |  |
| QEAD1616R/L13-SC | ✱ | ○     | ○ | 16x16           | G1/8  | 125 | 15    | 20             | 1,5 | 13                | 26    | G1/8  | Z*AD**                                                                              |         |  |
| QEAD2020R/L13-SC | ✱ | ○     | ○ | 20x20           | G1/8  | 125 | 19    | 20             | 1,5 | 13                | 26    | G1/8  | Z*AD**                                                                              |         |  |
| QEBD1010R/L10-SC | ✱ | ○     | ○ | 10x10           | G1/16 | 110 | 9     | 20             | 2   | 10                | 20    | G1/16 | Z*BD**                                                                              |         |  |
| QEBD1212R/L13-SC | ✱ | ●     | ● | 12x12           | G1/8  | 110 | 11    | 20             | 2   | 13                | 26    | G1/8  | Z*BD**                                                                              |         |  |
| QEBD1616R/L13-SC | ✱ | ●     | ● | 16x16           | G1/8  | 110 | 15    | 20             | 2   | 13                | 26    | G1/8  | Z*BD**                                                                              |         |  |
| QEBD2020R/L13-SC | ✱ | ○     | ○ | 20x20           | G1/8  | 110 | 19    | 20             | 2   | 13                | 26    | G1/8  | Z*BD**                                                                              |         |  |
| QEED1010R/L10-SC | ✱ | ○     | ○ | 10x10           | G1/16 | 110 | 8,75  | 20             | 2,5 | 10                | 20    | G1/16 | Z*ED**                                                                              |         |  |
| QEED1212R/L13-SC | ✱ | ●     | ● | 12x12           | G1/8  | 110 | 10,75 | 20             | 2,5 | 13                | 26    | G1/8  | Z*ED**                                                                              |         |  |
| QEED1616R/L17-SC | ✱ | ●     | ● | 16x16           | G1/8  | 110 | 14,75 | 20             | 2,5 | 17                | 34    | G1/8  | Z*ED**                                                                              |         |  |
| QEED2020R/L17-SC | ✱ | ●     | ● | 20x20           | G1/8  | 110 | 18,75 | 20             | 2,5 | 17                | 34    | G1/8  | Z*ED**                                                                              |         |  |
| QEFD1212R/L13-SC | ✱ | ●     | ● | 12x12           | G1/8  | 110 | 10,5  | 20             | 3   | 13                | 26    | G1/8  | Z*FD**                                                                              |         |  |
| QEFD1616R/L17-SC | ✱ | ●     | ● | 16x16           | G1/8  | 110 | 14,5  | 20             | 3   | 17                | 34    | G1/8  | Z*FD**                                                                              |         |  |
| QEFD2020R/L22-SC | ✱ | ●     | ● | 20x20           | G1/8  | 110 | 18,5  | 20             | 3   | 22                | 44    | G1/8  | Z*FD**                                                                              |         |  |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|  | Inserto          | Z*AD**                 | Z*AD**                 | Z*AD**        | Z*AD**        | Z*BD**                 | Z*BD**                 | Z*BD**                 | Z*ED**                 | Z*ED**                 | Z*ED**                 | Z*FD**                 | Z*FD**                 |
|--|------------------|------------------------|------------------------|---------------|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|  |                  | 10                     | 12                     | 16            | 20            | 10                     | 12                     | 16-20                  | 10                     | 12                     | 16-20                  | 12                     | 16-20                  |
|  | Vita senza testa | PT1/16x6               | PT1/8x4                | PT1/8x4       | PT1/8x4       | PT1/16x6               | PT1/8x4                | PT1/8x4                | PT1/16x6               | PT1/8x4                | PT1/8x4                | PT1/8x4                | PT1/8x4                |
|  | Vite             | GB70-85-M4x12 (2,6 Nm) | GB70-85-M4x12 (2,6 Nm) | GB70-85-M4x14 | GB70-85-M4x18 | GB70-85-M4x12 (2,6 Nm) | GB70-85-M4x12 (2,6 Nm) | GB70-85-M6x20 (7,0 Nm) | GB70-85-M4x12 (2,6 Nm) | GB70-85-M4x12 (2,6 Nm) | GB70-85-M6x20 (7,0 Nm) | GB70-85-M4x12 (2,6 Nm) | GB70-85-M5x20 (4,0 Nm) |
|  | Chiave           | WH30L                  | WH30L                  | WH30L         | WH30L         | WH30L                  | WH30L                  | WH40L                  | WH30L                  | WH30L                  | WH40L                  | WH30L                  | WH40L                  |
|  | Chiave           | WH40L                  | WH50L                  | WH50L         | WH50L         | WH40L                  | WH50L                  | WH50L                  | WH40L                  | WH50L                  | WH50L                  | WH50L                  | WH50L                  |

A

Tornitura

## Portautensile per scanalatura (esterna)

| Inserto                                                                           |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |  |
| A399                                                                              | A400                                                                              | A404                                                                              | A407                                                                              |

B

Fresatura

C

Foratura

D

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tecniche

E

Indice

Codice sistema > A422

Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456

## Accessori

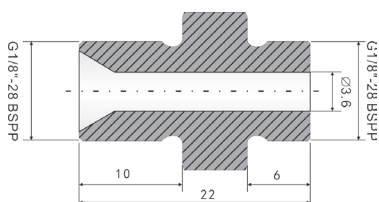
## Tubo del refrigerante



| Articolo             | Dimensions [mm] |               |               | Stock |
|----------------------|-----------------|---------------|---------------|-------|
|                      | L               | Th1           | Th2           |       |
| HOSE G1/8-7/16/200BS | 200             | G1/8"-28 BSPP | G1/8"-28 BSPP | ○     |
| HOSE G1/8-7/16/300BS | 300             | G1/8"-28 BSPP | G1/8"-28 BSPP | ○     |
| HOSE G1/8-7/16/200BB | 200             | G1/8"-28 BSPP | G1/8"-28 BSPP | ○     |
| HOSE G1/8-7/16/300BB | 300             | G1/8"-28 BSPP | G1/8"-28 BSPP | ○     |

● In magazzino ○ Su richiesta

## Raccordo del refrigerante



| Articolo          | Stock |
|-------------------|-------|
| NIPPLE G1/8- G1/8 | ○     |

● In magazzino ○ Su richiesta

A

Tornitura

B

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## Portautensili esterni – Serie QC

**GQC R 20 20 K 22 – 15**

1 2 3 4 5 6 7

| Serie | Versione |             | Altezza [mm] |             | Larghezza [mm] |             | Lunghezza [mm] |             |
|-------|----------|-------------|--------------|-------------|----------------|-------------|----------------|-------------|
|       | Code     | Descrizione | Code         | Descrizione | Code           | Descrizione | Code           | Descrizione |
|       | R        | Destra      | 16           | 16          | 16             | 16          | K              | 125         |
|       | L        | Sinistra    | 20           | 20          | 20             | 20          | M              | 150         |
|       |          |             | 25           | 25          | 25             | 25          |                |             |

1 2 3 4 5

| Lunghezza tagliente [mm] |       | Area larghezza scanalatura [mm] |                     |
|--------------------------|-------|---------------------------------|---------------------|
| Code                     | I.C   | Code                            | Dimensioni inserti  |
| 11                       | 6,35  | 15                              | 0,5≤S<1,8 (QC16***) |
| 16                       | 9,252 | 25                              | 1,8≤S<3,0 (QC16***) |
| 22                       | 12,70 | 35                              | –                   |

6 7

## Barre alesatrici – Serie QC

**S 20 K – QC 16 15 R 25**

1 2 3 4 5 6 7 8

| Versione del codolo |                             | Diametro [mm] |             | Lunghezza [mm] |             |
|---------------------|-----------------------------|---------------|-------------|----------------|-------------|
| Code                | Pezzo da lavorare           | Code          | Descrizione | Code           | Descrizione |
| S                   | Stelo in acciaio            | 16            | 16          | H              | 100         |
| C                   | Stelo in metallo duro       | 20            | 20          | K              | 125         |
| A                   | Stello in metallo duro (IK) | 25            | 25          | M              | 150         |

1 2 3

| Serie | Lunghezza tagliente [mm] |       | Area larghezza scanalatura |                     |                     |
|-------|--------------------------|-------|----------------------------|---------------------|---------------------|
|       | Code                     | I.C   | Dimensioni dell'inserto    |                     |                     |
|       | 11                       | 6,35  | 15                         | 0,5≤S<1,8 (QC11***) | 0,5≤S<1,8 (QC16***) |
|       | 16                       | 9,252 | 25                         | 1,8≤S<3,0 (QC11***) | 1,8≤S<3,0 (QC16***) |
|       | 22                       | 12,70 | 35                         | –                   | –                   |

4 5 6

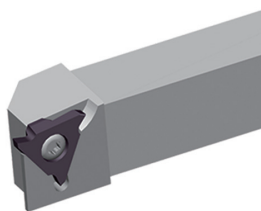
| Direzione di taglio |             | Diametro di partenza [mm] |    |
|---------------------|-------------|---------------------------|----|
| Code                | Descrizione | Code                      | Ø  |
| R                   | Destra      | 16                        | 16 |
| L                   | Sinistra    | 20                        | 20 |
|                     |             | 25                        | 25 |
|                     |             | 35                        | 35 |

7 8

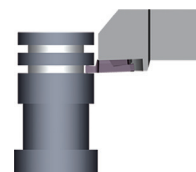
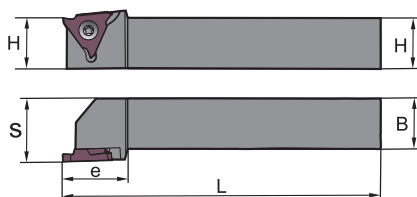


## Scanalatura (esterna)

GQC\*\*R/L



Versione destra



| Articolo         |  | Stock |   | Dimensioni [mm] |     |    |      |    |           | Inserto                                                                             |
|------------------|-----------------------------------------------------------------------------------|-------|---|-----------------|-----|----|------|----|-----------|-------------------------------------------------------------------------------------|
|                  |                                                                                   | R     | L | H               | L   | S  | e    | B  | Larghezza |  |
| GQCR/L1616K16-15 |                                                                                   | ●     | ● | 16              | 125 | 21 | 25,5 | 16 | 0.5-1.80  | QC16R/L 050-180                                                                     |
| GQCR/L2020K16-15 |                                                                                   | ○     | ● | 20              | 125 | 25 | 25,5 | 20 | 0.5-1.80  | QC16R/L 050-180                                                                     |
| GQCR/L2525M16-15 |                                                                                   | ○     | ● | 25              | 150 | 30 | 25,5 | 25 | 0.5-1.80  | QC16R/L 050-180                                                                     |
| GQCR/L1616K16-25 |                                                                                   | ●     | ● | 16              | 125 | 21 | 25,5 | 16 | 1.8-3.0   | QC16R/L 180-300                                                                     |
| GQCR/L2020K16-25 |                                                                                   | ○     | ● | 20              | 125 | 25 | 25,5 | 20 | 1.8-3.0   | QC16R/L 180-300                                                                     |
| GQCR/L2525M16-25 |                                                                                   | ○     | ● | 25              | 150 | 30 | 25,5 | 25 | 1.8-3.0   | QC16R/L 180-300                                                                     |
| GQCR/L2020K22-15 |                                                                                   | ○     | ● | 20              | 125 | 25 | 25,5 | 20 | 1.0-2.3   | QC22R/L 100-230                                                                     |
| GQCR/L2525M22-15 |                                                                                   | ○     | ● | 25              | 150 | 30 | 25,5 | 25 | 1.0-2.3   | QC22R/L 100-230                                                                     |
| GQCR/L2020K22-25 |                                                                                   | ○     | ● | 20              | 125 | 25 | 25,5 | 20 | 2.3-3.3   | QC22R/L 230-330                                                                     |
| GQCR/L2525M22-25 |                                                                                   | ○     | ● | 25              | 150 | 30 | 25,5 | 25 | 2.3-3.3   | QC22R/L 230-330                                                                     |
| GQCR/L2020K22-35 |                                                                                   | ●     | ● | 20              | 125 | 25 | 25,5 | 20 | 3.3-4.8   | QC22R/L 330-480                                                                     |
| GQCR/L2525M22-35 |                                                                                   | ●     | ● | 25              | 150 | 30 | 25,5 | 25 | 3.3-4.8   | QC22R/L 330-480                                                                     |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

## Parti di ricambio

|  | Inserto                   | QC16R/L 050-180        | QC16R/L 180-300        | QC22R/L 100-230      | QC22R/L 230-330      | QC22R/L 330-480      |
|--|---------------------------|------------------------|------------------------|----------------------|----------------------|----------------------|
|  | H                         | 16-32                  | 16-32                  | 16-32                | 16-32                | 16-32                |
|  | Vite                      | I60M3,5×10<br>(2,7 Nm) | I60M3,5×10<br>(2,7 Nm) | I60M5×13<br>(6,7 Nm) | I60M5×13<br>(6,7 Nm) | I60M5×13<br>(6,7 Nm) |
|  | Chiave (sotto-placchetta) | WT15IP                 | WT15IP                 | WT20IP               | WT20IP               | WT20IP               |

Inserto

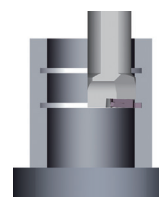
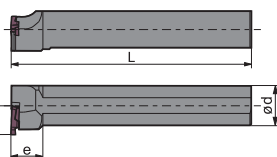
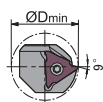
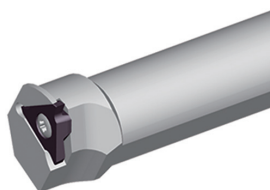


Media Lavor.

A417

S\_QCR/L

S\*K-QC\*\*R/L



Versione destra

| Articolo         | * | Stock |   | Dimensioni [mm] |    |     |      |    |           | Inserto         |
|------------------|---|-------|---|-----------------|----|-----|------|----|-----------|-----------------|
|                  |   | R     | L | ØDmin           | ød | L   | S    | e  | Larghezza |                 |
| S16H-QC1115R/L20 | ● | ●     |   | 21              | 16 | 100 | 11,5 | 12 | 0.5-1.80  | QC11R/L 050-180 |
| S20K-QC1115R/L16 | ● | ●     |   | 16              | 20 | 125 | 11,1 | 40 | 0.5-1.80  | QC11R/L 050-180 |
| S16H-QC1125R/L20 | ● | ●     |   | 21              | 16 | 100 | 11,5 | 12 | 1.8-3.0   | QC11R/L 180-300 |
| S20K-QC1125R/L16 | ○ | ○     |   | 16              | 20 | 125 | 11,1 | 40 | 1.8-3.0   | QC11R/L 180-300 |
| S20M-QC1615R/L25 | ○ | ●     |   | 26              | 20 | 150 | 12,5 | 15 | 0.5-1.80  | QC16R/L 050-180 |
| S20M-QC1625R/L25 | ● | ●     |   | 26              | 20 | 150 | 12,5 | 15 | 1.8-3.0   | QC16R/L 180-300 |
| S25M-QC2215R/L35 | ● | ●     |   | 35              | 25 | 150 | 18,2 | 15 | 1.0-2.3   | QC22R/L 100-230 |
| S25M-QC2225R/L35 | ● | ●     |   | 35              | 25 | 150 | 18,2 | 20 | 2.3-3.3   | QC22R/L 230-330 |
| S25M-QC2235R/L35 | ○ | ●     |   | 35              | 25 | 150 | 18,2 | 20 | 3.3-4.8   | QC22R/L 330-480 |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

Versione destra portautensile per versione sinistra inserto di taglio

Versione sinistra portautensile per versione destra inserto di taglio

Parti di ricambio

|  | Inserto                   | QC11R/L 050-180         | QC11R/L 180-300         | QC16R/L 050-180        | QC16R/L 180-300        | QC22R/L 100-230      | QC22R/L 230-330      | QC22R/L 330-480      |
|--|---------------------------|-------------------------|-------------------------|------------------------|------------------------|----------------------|----------------------|----------------------|
|  | ød                        | 16-20                   | 16-20                   | 20                     | 20                     | 25                   | 25                   | 25                   |
|  | Vite                      | I60M2,5x6,5<br>(1,0 Nm) | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x10<br>(2,7 Nm) | I60M3,5x10<br>(2,7 Nm) | I60M5x13<br>(6,7 Nm) | I60M5x13<br>(6,7 Nm) | I60M5x13<br>(6,7 Nm) |
|  | Chiave (sotto-placchetta) | WT07IP                  | WT07IP                  | WT15IP                 | WT15IP                 | WT20IP               | WT20IP               | WT20IP               |

Inserto



Media Lavor.

A417

Codice sistema > A452

Scelta gradi > A394

Informazioni tecniche > A501

Dati di taglio > A456

## This image shows a full page of a handwriting practice worksheet. It consists of approximately 20 horizontal rows. Each row is defined by two parallel dashed lines, creating a series of uniform gaps for letter height. The lines are evenly spaced across the entire page, providing a guide for consistent letter formation. There is no text or other markings on the page.

## Tornitura

## Fresatura

## Foratura

Informazioni  
tecniche

## Indice

## Inseriti per tornitura

| Gruppo materiali                             |                                                           | Composizione/Struttura/Trattamento termico    |                      | Durezza<br>HB Brinell | Gruppo di<br>sgrossatura | Velocità di taglio v <sub>c</sub> [m/min] |          |        |  |
|----------------------------------------------|-----------------------------------------------------------|-----------------------------------------------|----------------------|-----------------------|--------------------------|-------------------------------------------|----------|--------|--|
|                                              |                                                           |                                               |                      |                       |                          | HC (CVD)                                  | HC (PVD) |        |  |
|                                              |                                                           |                                               |                      |                       |                          | YBC252                                    | YBG102   | YBG105 |  |
| P                                            | Acciaio non legato                                        | ca. 0,15 % C                                  | Temprato             | 125                   | 1                        | 190                                       |          |        |  |
|                                              |                                                           | ca. 0,45 % C                                  | Temprato             | 190                   | 2                        | 175                                       |          |        |  |
|                                              |                                                           | ca. 0,45 % C                                  | pre-temprato         | 250                   | 3                        | 145                                       |          |        |  |
|                                              |                                                           | ca. 0,75 % C                                  | Temprato             | 270                   | 4                        | 140                                       |          |        |  |
|                                              |                                                           | ca. 0,75 % C                                  | pre-temprato         | 300                   | 5                        | 135                                       |          |        |  |
|                                              | Acciaio al carbonio                                       |                                               | Temprato             | 180                   | 6                        | 170                                       |          |        |  |
|                                              |                                                           |                                               | pre-temprato         | 275                   | 7                        | 125                                       |          |        |  |
|                                              |                                                           |                                               | pre-temprato         | 300                   | 8                        | 115                                       |          |        |  |
|                                              |                                                           |                                               | pre-temprato         | 350                   | 9                        | 105                                       |          |        |  |
|                                              | Acciaio alto legato e<br>acciaio alto legato per utensili |                                               | Temprato             | 200                   | 10                       | 125                                       |          |        |  |
|                                              |                                                           |                                               | temprato e rinvenuto | 325                   | 11                       | 95                                        |          |        |  |
| M                                            | Acciaio inossidabile                                      | ferritico/martensitico                        | Temprato             | 200                   | 12                       | 165                                       | 165      | 170    |  |
|                                              |                                                           | martensitico                                  | pre-temprato         | 240                   | 13                       | 135                                       | 135      | 140    |  |
|                                              |                                                           | austenitico                                   | quencing             | 180                   | 14                       | 155                                       | 155      | 160    |  |
|                                              |                                                           | austenitico-ferritico                         |                      | 230                   | 15                       | 135                                       | 135      | 140    |  |
| K                                            | Ghisa grigia                                              | perlitico/ferritico                           |                      | 180                   | 16                       | 240                                       |          |        |  |
|                                              |                                                           | perlitico (martensitico)                      |                      | 260                   | 17                       | 185                                       |          |        |  |
|                                              | Ghisa sferoidale                                          | ferritico                                     |                      | 160                   | 18                       | 220                                       |          |        |  |
|                                              |                                                           | perlitico                                     |                      | 250                   | 19                       | 165                                       |          |        |  |
|                                              | Ghisa malleabile                                          | ferritico                                     |                      | 130                   | 20                       | 175                                       |          |        |  |
|                                              |                                                           | perlitico                                     |                      | 230                   | 21                       | 165                                       |          |        |  |
| N                                            | Lavorazioni plastiche di leghe di alluminio               | non invecchiabile                             |                      | 60                    | 22                       |                                           |          |        |  |
|                                              |                                                           | invecchiabile                                 | indurito             | 100                   | 23                       |                                           |          |        |  |
|                                              | Leghe di alluminio fuso                                   | ≤ 12 % Si, non invecchiabile                  |                      | 75                    | 24                       |                                           |          |        |  |
|                                              |                                                           | ≤ 12 % Si, invecchiabile                      | indurito             | 90                    | 25                       |                                           |          |        |  |
|                                              |                                                           | > 12 % Si, non invecchiabile                  |                      | 130                   | 26                       |                                           |          |        |  |
|                                              | Rame e leghe di rame<br>(bronzo/ottone)                   | Leghe per macchine di tipo multiplo, PB > 1 % |                      | 110                   | 27                       |                                           |          |        |  |
|                                              |                                                           | CuZn, CuSnZn                                  |                      | 90                    | 28                       |                                           |          |        |  |
| CuSn, rame senza piombo e rame elettrolitico |                                                           | 100                                           | 29                   |                       |                          |                                           |          |        |  |
| S                                            | Leghe resistenti al calore                                | Base Fe                                       | Temprato             | 200                   | 30                       |                                           | 95       | 100    |  |
|                                              |                                                           |                                               | indurito             | 280                   | 31                       |                                           | 50       | 50     |  |
|                                              |                                                           | Base Ni o Co                                  | Temprato             | 250                   | 32                       |                                           | 80       | 80     |  |
|                                              |                                                           |                                               | indurito             | 350                   | 33                       |                                           | 70       | 70     |  |
|                                              |                                                           |                                               | fuso                 | 320                   | 34                       |                                           | 70       | 70     |  |
|                                              | Leghe di titanio                                          | Titanio puro                                  |                      | R <sub>m</sub> 400    | 35                       |                                           | 145      | 150    |  |
|                                              |                                                           | Leghe Alpha + Beta                            | indurito             | R <sub>m</sub> 1050   | 36                       |                                           | 50       | 50     |  |
| H                                            | Acciaio temprato                                          |                                               | temprato e rinvenuto | 55 HRC                | 37                       |                                           |          |        |  |
|                                              |                                                           |                                               | temprato e rinvenuto | 60 HRC                | 38                       |                                           |          |        |  |
|                                              | Ghisa dura                                                |                                               | fuso                 | 400                   | 39                       |                                           |          |        |  |
|                                              | Ghise temprate                                            |                                               | temprato e rinvenuto | 55 HRC                | 40                       |                                           |          |        |  |
| X                                            | Materiali non metallici                                   | Termoplastiche                                |                      |                       | 41                       |                                           |          |        |  |
|                                              |                                                           | Termoindurenti                                |                      |                       | 42                       |                                           |          |        |  |
|                                              |                                                           | Vetroresina VTR                               |                      |                       | 43                       |                                           |          |        |  |
|                                              |                                                           | Plastica rinforzata in fibra di carbonio      |                      |                       | 44                       |                                           |          |        |  |
|                                              |                                                           | Grafite                                       |                      |                       | 45                       |                                           |          |        |  |
|                                              |                                                           | Legno                                         |                      |                       | 46                       |                                           |          |        |  |

Note: I dati di taglio dati sono valori guida, che sono stati determinati in condizioni ideali.

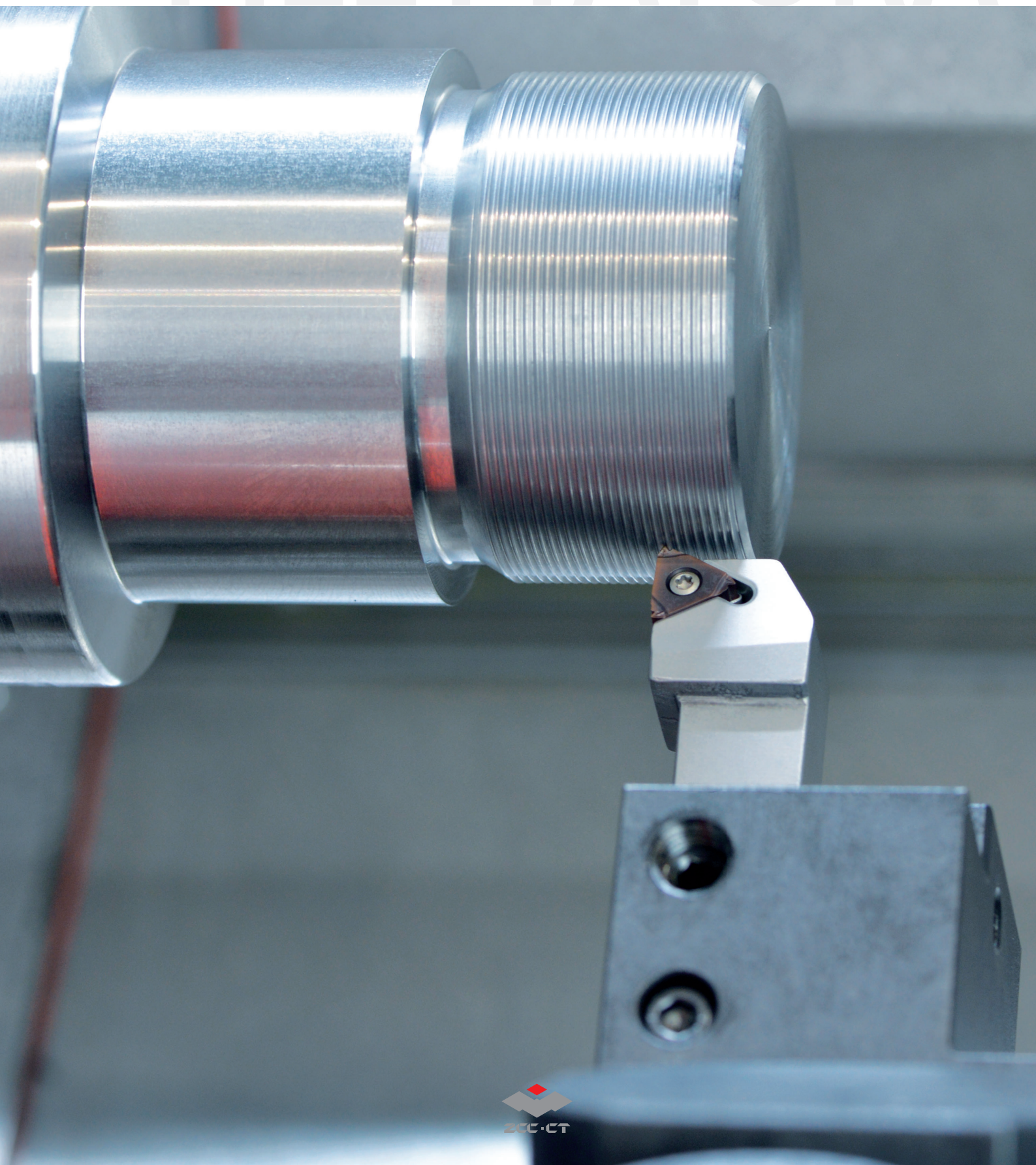
A seconda dell'applicazione, devono essere adattati individualmente.

Esempi di materiali per gruppi di taglio sono disponibili a pagina D11.

|    |                                                        |
|----|--------------------------------------------------------|
| HC | metallo duro rivestito                                 |
| HW | metallo duro non rivestito, componente principale (WC) |



# FILETTATURA



## Filettatura

|                                        |           |
|----------------------------------------|-----------|
| Panoramica sistema                     | A460-A463 |
| Panoramica gradi                       | A464      |
| Campo di applicazione dei gradi        | A465      |
| Codice sistema – Inserti               | A466      |
| Inserti                                | A467-A491 |
| Codice sistema – Portautensile         | A492      |
| Portautensile                          | A493-A499 |
| Dati di taglio consigliati             | A500      |
| Misure per la risoluzione dei problemi | A504      |
| Informazioni tecniche                  | A511-A512 |
| Gli utensili speciali                  | A513      |

**A**

Tornitura

**B**

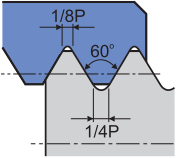
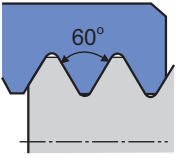
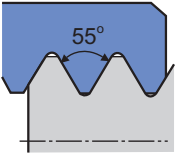
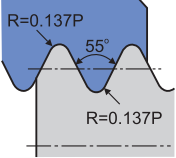
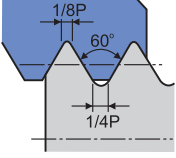
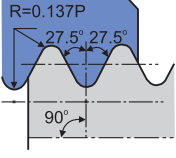
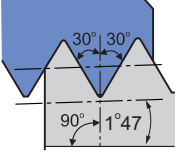
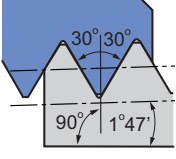
Fresatura

**C**

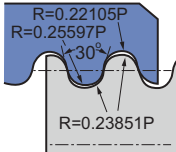
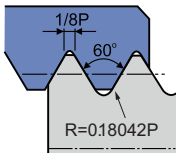
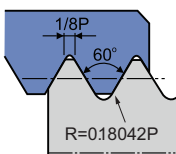
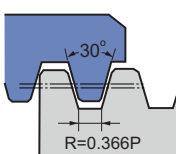
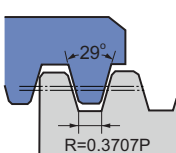
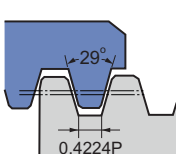
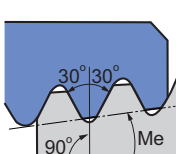
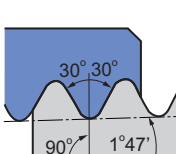
Foratura

**D**Informazioni  
tecniche**E**

Indice

| A<br>Tornitura             | Tipi di filettature                                   | Profilo | Disegno in sezione                                                                  | Inserto                                                                             | Filettatura interna<br>Passo mm (TPI) | Filettatura esterna<br>Passo mm (TPI) | Pagina |
|----------------------------|-------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------|--------|
|                            | Filettatura ISO-Metrica standard 60° Profilo completo | GM      |    |    | 0,5-6,0                               | 0,5-6,0                               | A467   |
| B<br>Fresatura             | 60° Profilo parziale                                  | 60°     |    |    | 0,5-5,0 (5-48)                        | 0,5-5,0 (5-48)                        | A469   |
|                            | 55° Profilo parziale                                  | 55°     |    |    | 0,5-5,0 (5-48)                        | 0,5-5,0 (5-48)                        | A470   |
| C<br>Foratura              | Whitworth                                             | W       |   |   | (8-16)                                | (8-16)                                | A471   |
|                            | Profilo completo UN Americano Filettatura 60°         | UN      |  |  | (8-20)                                | (8-20)                                | A472   |
| D<br>Informazioni tecniche | Filettatura BSPT conica per tubi                      | BSPT    |  |  | (11-28)                               | (11-28)                               | A473   |
|                            | Filettatura per tubi NPT                              | NPT     |  |  | (8-27)                                | (8-27)                                | A474   |
| E<br>Indice                | Filettatura per tubi NPTF autosigillante 60°          | NPTF    |  |  | (8-27)                                | (8-27)                                | A475   |



| Tipi di filettature                                 | Profilo | Disegno in sezione                                                                  | Inserto                                                                             | Filettatura interna<br>Passo mm (TPI) | Filettatura esterna<br>Passo mm (TPI) | Pagina |
|-----------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------|--------|
| Filettatura tonda R 30°                             | R       |    |    | (6-10)                                | (6-10)                                | A476   |
| Filettatura MJ per industria aerospaziale           | MJ      |    |    | ---                                   | 1,5-2,0                               | A477   |
| Filettatura a vite unificato UNJ                    | UNJ     |    |    | ---                                   | (8-32)                                | A478   |
| Filettatura metrica ISO trapezoidale TR 30°         | Tr      |   |   | 1,5-3,0                               | 1,5-3,0                               | A479   |
| Filettatura americana 29° trapezoidale ACME         | AC      |  |  | (8-16)                                | (8-16)                                | A480   |
| Filettatura americana trapezoidale piatta STUB-ACME | STAC    |  |  | (8-16)                                | (8-16)                                | A481   |
| Filettatura API 60°                                 | AP      |  |  | (4-5)                                 | (4-5)                                 | A482   |
| Filettatura tonda API                               | RD      |  |  | (8-10)                                | (8-10)                                | A483   |

**A**

Tornitura

**B**

Fresatura

**C**

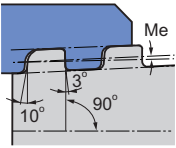
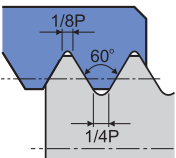
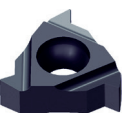
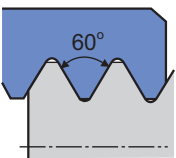
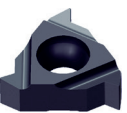
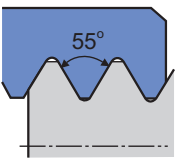
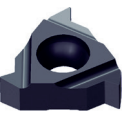
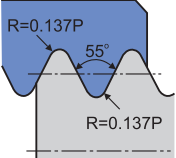
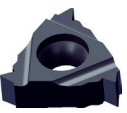
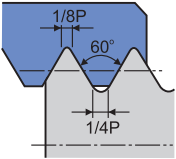
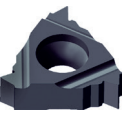
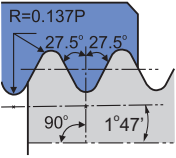
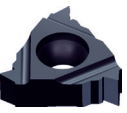
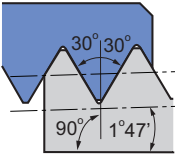
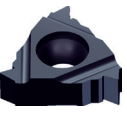
Foratura

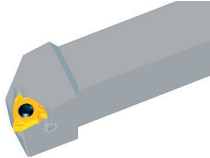
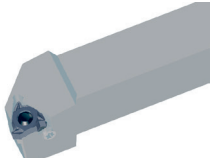
**D**

Informazioni  
tecniche

**E**

Indice

| Tipi di filettature                                                  | Profilo | Disegno in sezione                                                                  | Inserto                                                                             | Filettatura interna<br>Passo mm (TPI) | Filettatura esterna<br>Passo mm (TPI) | Pagina |
|----------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------|--------|
| Filettatura americana a dente di sega API                            | BUT     |    |    | (5)                                   | (5)                                   | A484   |
| Filettatura ISO-Metrica standard 60° Profilo completo (spessore ISO) | GM      |    |    | 0,5-3,0                               | 0,5-3,0                               | A485   |
| 60° Profilo parziale (spessore ISO)                                  | 60°     |    |    | 0,5-3,0 (8-48)                        | 0,5-3,0 (8-48)                        | A486   |
| 55° Profilo parziale (spessore ISO)                                  | 55°     |   |   | 0,5-3,0 (8-48)                        | 0,5-3,0 (8-48)                        | A487   |
| Whitworth (spessore ISO)                                             | W       |  |  | (8-16)                                | (8-16)                                | A488   |
| Profilo completo UN Americano Filettatura 60° (spessore ISO)         | UN      |  |  | (8-24)                                | (8-20)                                | A489   |
| Filettatura BSPT conica per tubi (spessore ISO)                      | BSPT    |  |  | (11-28)                               | (11-28)                               | A490   |
| Filettatura NPT per tubi (spessore ISO)                              | NPT     |  |  | (8-27)                                | (8-27)                                | A491   |

| Versione                                                | Portautensile                                                                       | Dimensioni [mm]                                                                                                 | Pagina |
|---------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--------|
| Portautensili per filettatura esterna                   |    | 16×16×100 20×20×125<br>25×25×150 32×25×170<br>32×32×170 40×40×250                                               | A493   |
| Portautensili per filettatura interna                   |    | 16×125×12 16×150×16<br>16×150×20 20×150×25<br>20×180×25 25×150×32<br>32×200×40 32×250×40<br>40×300×50 50×350×63 | A495   |
| Portautensili per filettatura esterna<br>(spessore ISO) |    | 16×16×100 32×25×170<br>20×20×125 32×32×170<br>25×25×150                                                         | A497   |
| Portautensili per filettatura interna<br>(spessore ISO) |  | 16×150×20 32×200×40<br>20×180×25 32×250×40<br>25×150×32                                                         | A498   |

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

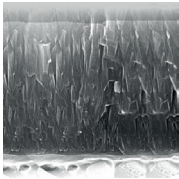
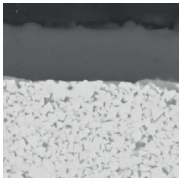
**D**

Informazioni  
tecniche

**E**

Indice

## Filettatura

| Grado         | ISO                               | Microstruttura                                                                    | Descrizione gradi                                                                                                                                                                                                                                                                                           |
|---------------|-----------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YBG201</b> | P10 - P30<br>M10 - M30            |  | Grado di metallo duro con rivestimento in PVD P10-P30/M10-M30 per lavorazioni dalla finitura all'asportazione media di acciai inossidabili e acciaio (fresatura). Ottima resistenza all'usura in una vasta gamma di applicazioni.                                                                           |
| <b>YBG205</b> | P10 - P30<br>M20 - M40<br>S15-S25 |  | Grado di metallo duro P10 - P30/M20 - M40/S15 - S25 con rivestimento in PVD multistrato per lavorazioni che spaziano dalla finitura all'asportazione media di acciaio inossidabile, superleghe e acciaio (fresatura). Resistenza all'usura e resistenza termica ottimali in un ampio campo di applicazione. |

A

Tornitura

B

Fresatura

C

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D

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Indice

Campi di applicazione dei gradi – filettatura

|          | ISO | HC <sup>1</sup> (CVD) | HC <sup>1</sup> (PVD) | HT | HC <sup>2</sup> | Ceramic | HW | CBN | PCD |
|----------|-----|-----------------------|-----------------------|----|-----------------|---------|----|-----|-----|
| <b>P</b> | P01 |                       |                       |    |                 |         |    |     |     |
|          | P10 |                       | YBG205                |    |                 |         |    |     |     |
|          | P20 |                       | YBG201                |    |                 |         |    |     |     |
|          | P30 |                       |                       |    |                 |         |    |     |     |
|          | P40 |                       |                       |    |                 |         |    |     |     |
| <b>M</b> | M01 |                       |                       |    |                 |         |    |     |     |
|          | M10 |                       | YBG205                |    |                 |         |    |     |     |
|          | M20 |                       | YBG201                |    |                 |         |    |     |     |
|          | M30 |                       |                       |    |                 |         |    |     |     |
|          | M40 |                       |                       |    |                 |         |    |     |     |
| <b>K</b> | K01 |                       |                       |    |                 |         |    |     |     |
|          | K10 |                       |                       |    |                 |         |    |     |     |
|          | K20 |                       |                       |    |                 |         |    |     |     |
|          | K30 |                       |                       |    |                 |         |    |     |     |
| <b>N</b> | N01 |                       |                       |    |                 |         |    |     |     |
|          | N10 |                       |                       |    |                 |         |    |     |     |
|          | N20 |                       |                       |    |                 |         |    |     |     |
|          | N30 |                       |                       |    |                 |         |    |     |     |
| <b>S</b> | S01 |                       |                       |    |                 |         |    |     |     |
|          | S10 |                       | YBG205                |    |                 |         |    |     |     |
|          | S20 |                       | YBG201                |    |                 |         |    |     |     |
|          | S30 |                       |                       |    |                 |         |    |     |     |
| <b>H</b> | H01 |                       |                       |    |                 |         |    |     |     |
|          | H10 |                       |                       |    |                 |         |    |     |     |
|          | H20 |                       |                       |    |                 |         |    |     |     |
|          | H30 |                       |                       |    |                 |         |    |     |     |

|          |                      |
|----------|----------------------|
| <b>P</b> | Acciaio              |
| <b>M</b> | Acciaio inossidabile |
| <b>K</b> | Ghisa                |

|          |                                    |
|----------|------------------------------------|
| <b>N</b> | Metalli non ferrosi                |
| <b>S</b> | Materiali a difficile asportazione |
| <b>H</b> | Materiali ad elevata durezza       |

HC<sup>1</sup> Carburo cementato rivestito  
 HT Cermet non rivestito  
 HC<sup>2</sup> Cermet rivestito  
 HW Metallo duro non rivestito

**A**

Tornitura

**B**

Fresatura

**C**

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**D**

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**E**

Indice

A

**R T 22. 01 W – 3.50 GM (P) (B)**

1

2

3

4

5

6

7

8

9

Tornitura

| Versione |             |
|----------|-------------|
| Code     | Descrizione |
| R        | Destra      |
| L        | Sinistra    |

1

Forma dell'inserto



Z Speciale

2

Dimensioni inserto [mm]

| Code | I.C   |
|------|-------|
| 11   | 6,35  |
| 16   | 9,252 |
| 22   | 12,70 |

3

B

Fresatura

| Denti per tagliente |             |
|---------------------|-------------|
| Code                | Descrizione |
| 01                  | 1           |
| 02                  | 2           |
|                     |             |
|                     |             |
|                     |             |
|                     |             |
|                     |             |
|                     |             |
|                     |             |
|                     |             |
|                     |             |

4

Tipo lavorazione

| Code | Descrizione         |
|------|---------------------|
| W    | Filettatura esterna |
| N    | Filettatura interna |
|      |                     |
|      |                     |
|      |                     |
|      |                     |
|      |                     |
|      |                     |
|      |                     |
|      |                     |
|      |                     |

5

Passo

| Code                                          | Intervallo del passo (profilo parziale) |               |
|-----------------------------------------------|-----------------------------------------|---------------|
| A                                             | 0,5 – 1,5 mm                            | 48 – 16 (TPI) |
| AG                                            | 0,5 – 3,0 mm                            | 48 – 8 (TPI)  |
| G                                             | 1,75 – 3,0 mm                           | 14 – 8 (TPI)  |
| N                                             | 3,5 – 5,0 mm                            | 7 – 5 (TPI)   |
| Intervallo del passo [mm] (profilo completo)  |                                         |               |
| 0,50 0,75 1,00 1,25 1,50                      |                                         |               |
| 1,75 2,00 2,50 3,00 3,50                      |                                         |               |
| 4,00 4,50 5,00 5,50 6,00                      |                                         |               |
| Intervallo del passo (TPI) (profilo completo) |                                         |               |
| 4 5 6 8                                       |                                         |               |
| 10 11 11,5 12                                 |                                         |               |
| 14 16 18 19                                   |                                         |               |
| 20 24 27 28                                   |                                         |               |

6

C

Foratura

D

Informazioni tecniche

Profilo del filetto

| Code | Descrizione                               |
|------|-------------------------------------------|
| GM   | Filettatura ISO-Metrica standard 60°      |
| 60   | Profilo parziale 60°                      |
| 55   | Profilo parziale 55°                      |
| W    | Whitworth                                 |
| UN   | Filettatura UN Americano 60°              |
| BSPT | Filettatura conica per tubi               |
| NPT  | Filettatura per tubi                      |
| NPTF | Filettatura per tubi autosigillante       |
| R    | Filettatura tondo 30°                     |
| MJ   | Filettatura per industria aerospaziale    |
| UNJ  | Filettatura a vite unificato UNJ          |
| TR   | Filettatura metrica ISO trapezoidale      |
| AC   | Filettatura americana trapezoidale        |
| STAC | Filettatura americana trapezoidale piatta |
| AP   | Filettatura API 60°                       |
| RD   | Filettatura tonda API                     |
| BUT  | Filettatura americana a dente di sega     |

7

Rompitruciolo

8

Spessore dell'inserto [mm]

| Code | Descrizione  |
|------|--------------|
| B    | Spessore ISO |

9

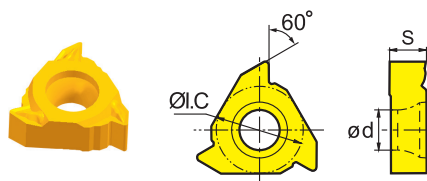
E

Indice

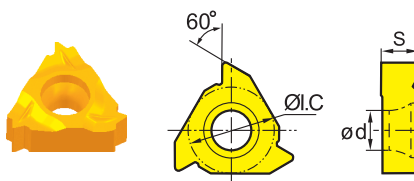
# Inserti per filettatura

| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| <b>11</b> | 6,35  | 3,18 | 2,8 |
| <b>16</b> | 9,525 | 3,97 | 4,4 |
| <b>22</b> | 12,7  | 5,56 | 5,5 |

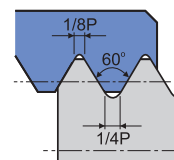
## Filettatura ISO-Metrica standard 60° Profilo completo



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



ISO 965-1980 DIN 13  
GB-T 197-2003 Tolleranza: 6g-6H

| ISO | Passo (mm) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |
|-----|------------|---------------------|-----------------------|--------|--|--|---------------------|-----------------------|--------|--|--|
|     |            |                     | YBG201                | YBG205 |  |  |                     | YBG201                | YBG205 |  |  |
| 11  | 0,50       | -                   |                       |        |  |  | RT11.01N-0.50GM     | ○                     |        |  |  |
| 11  |            | -                   |                       |        |  |  | LT11.01N-0.50GM     | ○                     |        |  |  |
| 11  | 0,75       | -                   |                       |        |  |  | RT11.01N-0.75GM     | ●                     |        |  |  |
| 11  |            | -                   |                       |        |  |  | LT11.01N-0.75GM     | ○                     |        |  |  |
| 11  | 1,00       | -                   |                       |        |  |  | RT11.01N-1.00GM     | ○ ●                   |        |  |  |
| 11  |            | -                   |                       |        |  |  | LT11.01N-1.00GM     | ●                     |        |  |  |
| 11  | 1,25       | -                   |                       |        |  |  | RT11.01N-1.25GM     | ●                     |        |  |  |
| 11  |            | -                   |                       |        |  |  | LT11.01N-1.25GM     | ●                     |        |  |  |
| 11  | 1,50       | -                   |                       |        |  |  | RT11.01N-1.50GM     | ○ ●                   |        |  |  |
| 11  |            | -                   |                       |        |  |  | LT11.01N-1.50GM     | ●                     |        |  |  |
| 11  | 1,75       | -                   |                       |        |  |  | RT11.01N-1.75GM     | ○                     |        |  |  |
| 11  |            | -                   |                       |        |  |  | LT11.01N-1.75GM     | ●                     |        |  |  |
| 11  | 2,00       | -                   |                       |        |  |  | RT11.01N-2.00GM     | ○ ●                   |        |  |  |
| 11  |            | -                   |                       |        |  |  | LT11.01N-2.00GM     | ●                     |        |  |  |
| 16  | 0,50       | -                   |                       |        |  |  | RT16.01N-0.50GM     | ○                     |        |  |  |
| 16  |            | -                   |                       |        |  |  | LT16.01N-0.50GM     | ○                     |        |  |  |
| 16  | 0,75       | -                   |                       |        |  |  | RT16.01N-0.75GM     | ○                     |        |  |  |
| 16  |            | -                   |                       |        |  |  | LT16.01N-0.75GM     | ○                     |        |  |  |
| 16  | 1,00       | RT16.01W-1.00GM     | ○ ●                   |        |  |  | RT16.01N-1.00GM     | ○                     |        |  |  |
| 16  |            | LT16.01W-1.00GM     | ●                     |        |  |  | LT16.01N-1.00GM     | ●                     |        |  |  |
| 16  | 1,25       | RT16.01W-1.25GM     | ○ ●                   |        |  |  | RT16.01N-1.25GM     | ○                     |        |  |  |
| 16  |            | LT16.01W-1.25GM     | ●                     |        |  |  | LT16.01N-1.25GM     | ●                     |        |  |  |
| 16  | 1,50       | RT16.01W-1.50GM     | ○ ●                   |        |  |  | RT16.01N-1.50GM     | ●                     |        |  |  |
| 16  |            | LT16.01W-1.50GM     | ●                     |        |  |  | LT16.01N-1.50GM     | ●                     |        |  |  |
| 16  | 1,75       | RT16.01W-1.75GM     | ●                     |        |  |  | RT16.01N-1.75GM     | ○                     |        |  |  |
| 16  |            | LT16.01W-1.75GM     | ●                     |        |  |  | LT16.01N-1.75GM     | ●                     |        |  |  |
| 16  | 2,00       | RT16.01W-2.00GM     | ○ ●                   |        |  |  | RT16.01N-2.00GM     | ○ ●                   |        |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

Codice sistema > A466

Scelta gradi > A465

Informazioni tecniche > A501

Dati di taglio > A500



A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

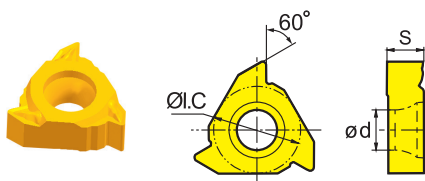
E

Indice

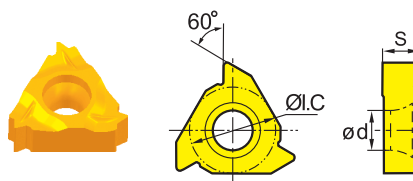
| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| <b>11</b> | 6,35  | 3,18 | 2,8 |
| <b>16</b> | 9,525 | 3,97 | 4,4 |
| <b>22</b> | 12,7  | 5,56 | 5,5 |

## Inseri per filettatura

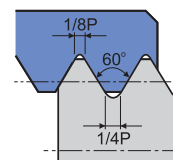
### Filettatura ISO-Metrica standard 60° Profilo completo



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



ISO 965-1980 DIN 13  
GB-T 197-2003 Tolleranza: 6g-6H

| ISO | Passo (mm) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |
|-----|------------|---------------------|-----------------------|--------|--|--|--|---------------------|-----------------------|--------|--|--|--|
|     |            |                     | YBG201                | YBG205 |  |  |  |                     | YBG201                | YBG205 |  |  |  |
| 16  | 2,00       | LT16.01W-2.00GM     | ●                     |        |  |  |  | LT16.01N-2.00GM     | ●                     |        |  |  |  |
| 16  | 2,50       | RT16.01W-2.50GM     | ○                     | ●      |  |  |  | RT16.01N-2.50GM     | ○                     | ●      |  |  |  |
| 16  |            | LT16.01W-2.50GM     | ●                     |        |  |  |  | LT16.01N-2.50GM     | ●                     |        |  |  |  |
| 16  | 3,00       | RT16.01W-3.00GM     | ○                     | ●      |  |  |  | RT16.01N-3.00GM     | ○                     | ●      |  |  |  |
| 16  |            | LT16.01W-3.00GM     | ●                     |        |  |  |  | LT16.01N-3.00GM     | ●                     |        |  |  |  |
| 22  | 3,50       | RT22.01W-3.50GM     | ○                     |        |  |  |  | RT22.01N-3.50GM     | ○                     | ●      |  |  |  |
| 22  |            | LT22.01W-3.50GM     | ●                     |        |  |  |  | LT22.01N-3.50GM     | ●                     |        |  |  |  |
| 22  | 4,00       | RT22.01W-4.00GM     | ○                     | ●      |  |  |  | RT22.01N-4.00GM     | ●                     |        |  |  |  |
| 22  |            | LT22.01W-4.00GM     | ●                     |        |  |  |  | LT22.01N-4.00GM     | ●                     |        |  |  |  |
| 22  | 4,50       | RT22.01W-4.50GM     | ○                     |        |  |  |  | RT22.01N-4.50GM     | ○                     | ●      |  |  |  |
| 22  |            | LT22.01W-4.50GM     | ○                     |        |  |  |  | LT22.01N-4.50GM     | ●                     |        |  |  |  |
| 22  | 5,00       | RT22.01W-5.00GM     | ○                     |        |  |  |  | RT22.01N-5.00GM     | ○                     |        |  |  |  |
| 22  |            | LT22.01W-5.00GM     | ●                     |        |  |  |  | LT22.01N-5.00GM     | ●                     |        |  |  |  |
| 22  | 5,50       | RT22.01W-5.50GM     | ○                     |        |  |  |  | RT22.01N-5.50GM     | ○                     |        |  |  |  |
| 22  |            | LT22.01W-5.50GM     | ○                     |        |  |  |  | LT22.01N-5.50GM     | ●                     |        |  |  |  |
| 22  | 6,00       | RT22.01W-6.00GM     | ○                     | ●      |  |  |  | RT22.01N-6.00GM     | ○                     | ●      |  |  |  |
| 22  |            | LT22.01W-6.00GM     | ●                     |        |  |  |  | LT22.01N-6.00GM     | ●                     |        |  |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

#### Utensile

SWR/L

SNR/L



A493-A494



A495-A496

Codice sistema > A466

Scelta gradi > A465

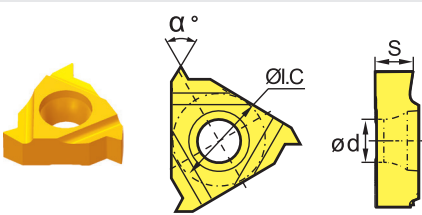
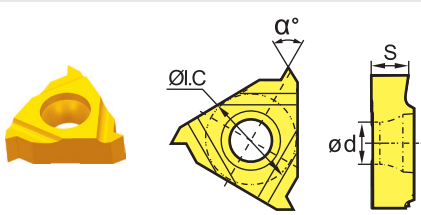
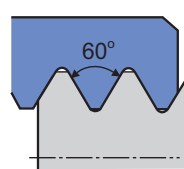
Informazioni tecniche > A501

Dati di taglio > A500



## Inserti per filettatura

| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| <b>16</b> | 9,525 | 3,97 | 4,4 |
| <b>22</b> | 12,7  | 5,56 | 5,5 |

| 60° Profilo parziale                                                              |             |                     |                       |        |  |  |  |                                                                                    |                       |        |                                                                                     |  |  |
|-----------------------------------------------------------------------------------|-------------|---------------------|-----------------------|--------|--|--|--|------------------------------------------------------------------------------------|-----------------------|--------|-------------------------------------------------------------------------------------|--|--|
|  |             |                     |                       |        |  |  |  |  |                       |        |  |  |  |
| Versione destra esterna<br>Versione sinistra interna                              |             |                     |                       |        |  |  |  | Versione destra interna<br>Versione sinistra esterna                               |                       |        |                                                                                     |  |  |
| ISO                                                                               | Passo (mm)  | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  | Lavorazione interna                                                                | HC <sup>1</sup> (PVD) |        |                                                                                     |  |  |
|                                                                                   |             |                     | YBG201                | YBG205 |  |  |  |                                                                                    | YBG201                | YBG205 |                                                                                     |  |  |
| 16                                                                                | 0,50 - 1,50 | RT16.01W-A60        | ○                     | ●      |  |  |  | RT16.01N-A60                                                                       | ○                     |        |                                                                                     |  |  |
| 16                                                                                |             | LT16.01W-A60        | ●                     |        |  |  |  | LT16.01N-A60                                                                       | ●                     |        |                                                                                     |  |  |
| 16                                                                                | 0,50 - 3,00 | RT16.01W-AG60       | ○                     | ●      |  |  |  | RT16.01N-AG60                                                                      | ○                     |        |                                                                                     |  |  |
| 16                                                                                |             | LT16.01W-AG60       | ●                     |        |  |  |  | LT16.01N-AG60                                                                      | ●                     | ●      |                                                                                     |  |  |
| 16                                                                                | 1,75 - 3,00 | RT16.01W-G60        | ○                     |        |  |  |  | RT16.01N-G60                                                                       | ○                     |        |                                                                                     |  |  |
| 16                                                                                |             | LT16.01W-G60        | ●                     |        |  |  |  | LT16.01N-G60                                                                       | ○                     |        |                                                                                     |  |  |
| 16                                                                                |             | LT16.01W-G60P       | ●                     |        |  |  |  | LT16.01N-G60P                                                                      | ○                     |        |                                                                                     |  |  |
| 16                                                                                |             | RT16.01W-G60P*      | ○                     | ○      |  |  |  | RT16.01N-G60P*                                                                     | ○                     |        |                                                                                     |  |  |
| 22                                                                                | 3,50 - 5,00 | LT22.01W-N60P       | ○                     |        |  |  |  | -                                                                                  |                       |        |                                                                                     |  |  |
| 22                                                                                |             | RT22.01W-N60P*      | ●                     |        |  |  |  | RT22.01N-N60P*                                                                     | ●                     |        |                                                                                     |  |  |
| 22                                                                                |             | LT22.01W-N60P*      |                       |        |  |  |  | LT22.01N-N60P*                                                                     | ○                     |        |                                                                                     |  |  |

● In magazzino ○ Su richiesta  
P\*: Inserti con rompitruoli

HC<sup>1</sup> Carburo cementato rivestito

| Utensile                                                                            |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SWR/L                                                                               | SNR/L                                                                               |
|  |  |
| A493-A494                                                                           | A495-A496                                                                           |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni tecniche

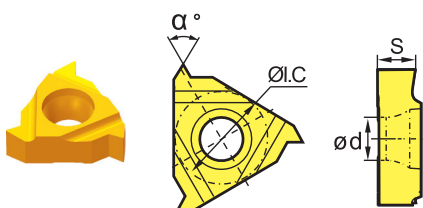
E

Indice

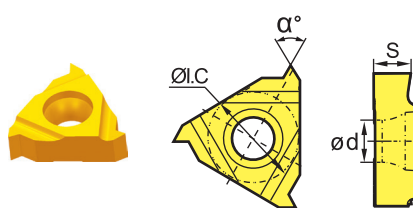
| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| <b>16</b> | 9,525 | 3,97 | 4,4 |
| <b>22</b> | 12,7  | 5,56 | 5,5 |

## Inserti per filettatura

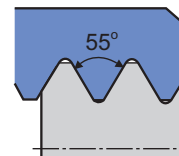
### 55° Profilo parziale



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



| ISO | Passo (tpi) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |
|-----|-------------|---------------------|-----------------------|--------|--|--|--|---------------------|-----------------------|--------|--|--|--|
|     |             |                     | YBG201                | YBG205 |  |  |  |                     | YBG201                | YBG205 |  |  |  |
| 16  | 48 - 16     | RT16.01W-A55        | ○                     |        |  |  |  | RT16.01N-A55        | ○                     |        |  |  |  |
| 16  |             | LT16.01W-A55        | ●                     |        |  |  |  | LT16.01N-A55        | ○                     |        |  |  |  |
| 16  | 48 - 8      | RT16.01W-AG55       | ●                     |        |  |  |  | RT16.01N-AG55       | ○ ●                   |        |  |  |  |
| 16  |             | LT16.01W-AG55       | ○                     |        |  |  |  | LT16.01N-AG55       | ●                     |        |  |  |  |
| 16  | 14 - 8      | RT16.01W-G55        | ○                     |        |  |  |  | RT16.01N-G55        | ○                     |        |  |  |  |
| 16  |             | LT16.01W-G55        | ●                     |        |  |  |  | LT16.01N-G55        | ○                     |        |  |  |  |
| 16  |             | LT16.01W-G55P       | ●                     |        |  |  |  | LT16.01N-G55P       | ●                     |        |  |  |  |
| 16  |             | RT16.01W-G55P*      | ○                     |        |  |  |  | RT16.01N-G55P*      | ○                     |        |  |  |  |
| 22  | 7 - 5       | RT22.01W-N55P       | ○                     |        |  |  |  | RT22.01N-N55P       | ○                     |        |  |  |  |
| 22  |             | -                   |                       |        |  |  |  | LT22.01N-N55        | ○                     |        |  |  |  |

● In magazzino ○ Su richiesta  
P\*: Inserti con rompitrucoli

HC<sup>1</sup> Carburo cementato rivestito

### Utensile

| SWR/L                                                                               | SNR/L                                                                               |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |
| A493-A494                                                                           | A495-A496                                                                           |

Codice sistema > A466

Scelta gradi > A465

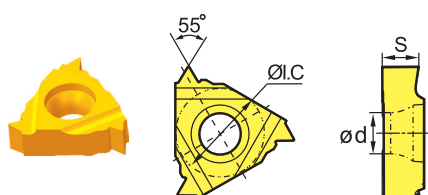
Informazioni tecniche > A501

Dati di taglio > A500

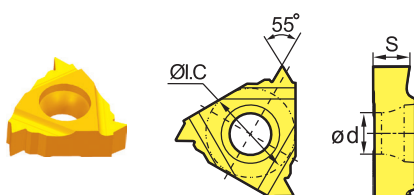
# Inserti per filettatura

| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| <b>16</b> | 9,525 | 3,97 | 4,4 |

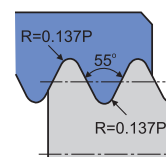
## Whitworth



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



ISO 228-1:1982 DIN 259  
B.S.84: 1956 Tolleranza: Classe 1 media

| ISO | Passo (tpi) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |
|-----|-------------|---------------------|-----------------------|--------|--|--|--|---------------------|-----------------------|--------|--|--|--|
|     |             |                     | YBG201                | YBG205 |  |  |  |                     | YBG201                | YBG205 |  |  |  |
| 16  | 8,00        | RT16.01W-8W         | ○                     |        |  |  |  | RT16.01N-8W         | ○                     |        |  |  |  |
| 16  |             | LT16.01W-8W         | ●                     |        |  |  |  | LT16.01N-8W         | ●                     |        |  |  |  |
| 16  | 9,00        | -                   |                       |        |  |  |  | RT16.01N-9W         | ○                     |        |  |  |  |
| 16  |             | LT16.01W-9W         | ○                     |        |  |  |  | LT16.01N-9W         | ○                     |        |  |  |  |
| 16  | 10,00       | RT16.01W-10W        | ○                     |        |  |  |  | RT16.01N-10W        | ○                     |        |  |  |  |
| 16  |             | LT16.01W-10W        | ○                     |        |  |  |  | LT16.01N-10W        | ○                     |        |  |  |  |
| 16  | 11,00       | RT16.01W-11W        | ○ ●                   |        |  |  |  | RT16.01N-11W        | ○ ●                   |        |  |  |  |
| 16  |             | LT16.01W-11W        | ●                     |        |  |  |  | LT16.01N-11W        | ○                     |        |  |  |  |
| 16  | 12,00       | RT16.01W-12W        | ○                     |        |  |  |  | RT16.01N-12W        | ○                     |        |  |  |  |
| 16  |             | LT16.01W-12W        | ○                     |        |  |  |  | LT16.01N-12W        | ○                     |        |  |  |  |
| 16  | 14,00       | RT16.01W-14W        | ●                     |        |  |  |  | RT16.01N-14W        | ○ ●                   |        |  |  |  |
| 16  |             | LT16.01W-14W        | ○                     |        |  |  |  | LT16.01N-14W        | ○                     |        |  |  |  |
| 16  | 16,00       | RT16.01W-16W        | ○ ●                   |        |  |  |  | RT16.01N-16W        | ○ ●                   |        |  |  |  |
| 16  |             | LT16.01W-16W        | ○                     |        |  |  |  | LT16.01N-16W        | ○                     |        |  |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

## Utensile

| SWR/L     | SNR/L     |
|-----------|-----------|
|           |           |
| A493-A494 | A495-A496 |

Codice sistema > A466

Scelta gradi > A465

Informazioni tecniche > A501

Dati di taglio > A500

A

## Inseri per filettatura

| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| 16        | 9,525 | 3,97 | 4,4 |

Tornitura

B

Fresatura

C

Foratura

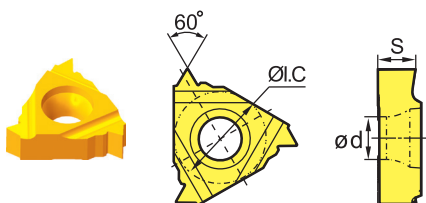
D

Informazioni tecniche

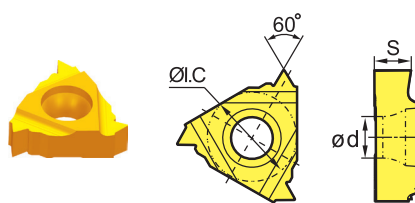
E

Indice

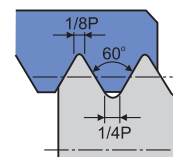
### Profilo completo UN Americano Filettatura 60°



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



AS/E B1.1-1989  
Tolleranza: 2A-2B

| ISO | Passo (tpi) | Lavorazione esterna | HC¹ (PVD) |        |  |  |  |  | Lavorazione interna | HC¹ (PVD) |        |  |  |  |  |
|-----|-------------|---------------------|-----------|--------|--|--|--|--|---------------------|-----------|--------|--|--|--|--|
|     |             |                     | YBG201    | YBG205 |  |  |  |  |                     | YBG201    | YBG205 |  |  |  |  |
| 16  | 8,00        | RT16.01W-8UN        | ○         |        |  |  |  |  | RT16.01N-8UN        | ○         |        |  |  |  |  |
| 16  |             | LT16.01W-8UN        | ○         |        |  |  |  |  | LT16.01N-8UN        | ○         |        |  |  |  |  |
| 16  | 10,00       | RT16.01W-10UN       | ○         |        |  |  |  |  | RT16.01N-10UN       | ○         |        |  |  |  |  |
| 16  |             | LT16.01W-10UN       | ○         |        |  |  |  |  | LT16.01N-10UN       | ○         |        |  |  |  |  |
| 16  | 12,00       | RT16.01W-12UN       | ○         |        |  |  |  |  | RT16.01N-12UN       | ○         |        |  |  |  |  |
| 16  |             | LT16.01W-12UN       | ○         |        |  |  |  |  | LT16.01N-12UN       | ○         |        |  |  |  |  |
| 16  | 14,00       | RT16.01W-14UN       | ○         |        |  |  |  |  | RT16.01N-14UN       | ○         |        |  |  |  |  |
| 16  |             | LT16.01W-14UN       | ○         |        |  |  |  |  | LT16.01N-14UN       | ○         |        |  |  |  |  |
| 16  | 16,00       | RT16.01W-16UN       | ○         |        |  |  |  |  | RT16.01N-16UN       | ○         |        |  |  |  |  |
| 16  |             | LT16.01W-16UN       | ○         |        |  |  |  |  | LT16.01N-16UN       | ○         |        |  |  |  |  |
| 16  | 18,00       | RT16.01W-18UN       | ○         |        |  |  |  |  | RT16.01N-18UN       | ○         |        |  |  |  |  |
| 16  |             | LT16.01W-18UN       | ○         |        |  |  |  |  | LT16.01N-18UN       | ○         |        |  |  |  |  |
| 16  | 20,00       | RT16.01W-20UN       | ○         |        |  |  |  |  | RT16.01N-20UN       | ○         |        |  |  |  |  |
| 16  |             | LT16.01W-20UN       | ○         |        |  |  |  |  | LT16.01N-20UN       | ○         |        |  |  |  |  |
| 16  | 24,00       | -                   |           |        |  |  |  |  | RT16.01N-24UN       | ○         |        |  |  |  |  |
| 16  |             | -                   |           |        |  |  |  |  | LT16.01N-24UN       | ○         |        |  |  |  |  |

● In magazzino ○ Su richiesta

HC¹ Carburo cementato rivestito

| Utensile  |           |
|-----------|-----------|
| SWR/L     | SNR/L     |
|           |           |
| A493-A494 | A495-A496 |

Codice sistema > A466

Scelta gradi > A465

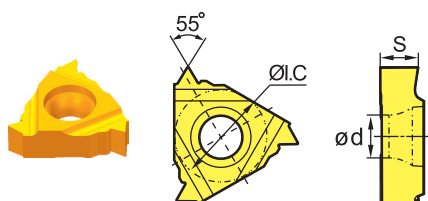
Informazioni tecniche > A501

Dati di taglio > A500

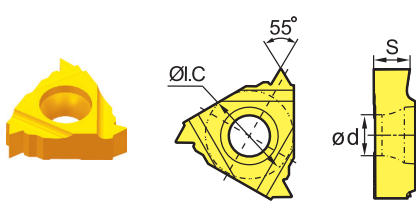
## Inserti per filettatura

| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| <b>16</b> | 9,525 | 3,97 | 4,4 |

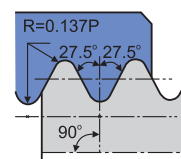
### Filettatura BSPT conica per tubi



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



ISO 7-1: 1984 B.S.21:1985  
BSPT standard

| ISO | Passo (tpi) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |
|-----|-------------|---------------------|-----------------------|--------|--|--|--|---------------------|-----------------------|--------|--|--|--|
|     |             |                     | YBG201                | YBG205 |  |  |  |                     | YBG201                | YBG205 |  |  |  |
| 16  | 11,00       | RT16.01W-11BSPT     | ○                     |        |  |  |  | RT16.01N-11BSPT     | ○                     |        |  |  |  |
| 16  |             | LT16.01W-11BSPT     | ●                     |        |  |  |  | LT16.01N-11BSPT     | ○                     |        |  |  |  |
| 16  | 14,00       | RT16.01W-14BSPT     | ○                     |        |  |  |  | RT16.01N-14BSPT     | ○                     |        |  |  |  |
| 16  |             | LT16.01W-14BSPT     | ○                     |        |  |  |  | LT16.01N-14BSPT     | ○                     |        |  |  |  |
| 16  | 19,00       | RT16.01W-19BSPT     | ○                     |        |  |  |  | RT16.01N-19BSPT     | ○                     |        |  |  |  |
| 16  |             | LT16.01W-19BSPT     | ○                     |        |  |  |  | LT16.01N-19BSPT     | ○                     |        |  |  |  |
| 16  | 28,00       | RT16.01W-28BSPT     | ○                     |        |  |  |  | RT16.01N-28BSPT     | ○                     |        |  |  |  |
| 16  |             | LT16.01W-28BSPT     | ○                     |        |  |  |  | LT16.01N-28BSPT     | ○                     |        |  |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

### Utensile

| SWR/L     | SNR/L     |
|-----------|-----------|
|           |           |
| A493-A494 | A495-A496 |

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni  
tecniche

**E**

Indice

A

## Inseriti per filettatura

| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| 16        | 9,525 | 3,97 | 4,4 |

Tornitura

B

Fresatura

C

Foratura

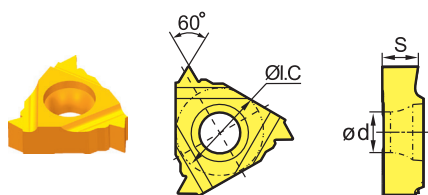
D

Informazioni tecniche

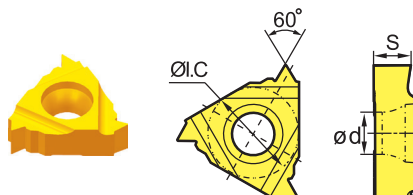
E

Indice

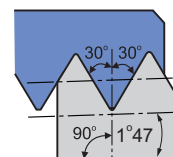
### Filettatura per tubi NPT



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



ASME B1.20.1-1983  
NPT standard

| ISO | Passo (tpi) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |  |
|-----|-------------|---------------------|-----------------------|--------|--|--|--|--|---------------------|-----------------------|--------|--|--|--|--|
|     |             |                     | YBG201                | YBG205 |  |  |  |  |                     | YBG201                | YBG205 |  |  |  |  |
| 16  | 8,00        | RT16.01W-8NPT       | ○                     |        |  |  |  |  | RT16.01N-8NPT       | ○                     |        |  |  |  |  |
| 16  |             | LT16.01W-8NPT       | ○                     |        |  |  |  |  | LT16.01N-8NPT       | ○                     |        |  |  |  |  |
| 16  | 11,50       | RT16.01W-11.5NPT    | ○                     |        |  |  |  |  | RT16.01N-11.5NPT    | ○                     |        |  |  |  |  |
| 16  |             | LT16.01W-11.5NPT    | ○                     |        |  |  |  |  | LT16.01N-11.5NPT    | ○                     |        |  |  |  |  |
| 16  | 14,00       | RT16.01W-14NPT      | ○ ○                   |        |  |  |  |  | RT16.01N-14NPT      | ○                     |        |  |  |  |  |
| 16  |             | LT16.01W-14NPT      | ○                     |        |  |  |  |  | LT16.01N-14NPT      | ○                     |        |  |  |  |  |
| 16  | 18,00       | RT16.01W-18NPT      | ○                     |        |  |  |  |  | RT16.01N-18NPT      | ○                     |        |  |  |  |  |
| 16  |             | LT16.01W-18NPT      | ○                     |        |  |  |  |  | LT16.01N-18NPT      | ○                     |        |  |  |  |  |
| 16  | 27,00       | RT16.01W-27NPT      | ○                     |        |  |  |  |  | RT16.01N-27NPT      | ○                     |        |  |  |  |  |
| 16  |             | LT16.01W-27NPT      | ○                     |        |  |  |  |  | LT16.01N-27NPT      | ○                     |        |  |  |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

### Utensile

| SWR/L     | SNR/L     |
|-----------|-----------|
|           |           |
| A493-A494 | A495-A496 |

D

Informazioni tecniche

E

Indice

Codice sistema > A466

Scelta gradi > A465

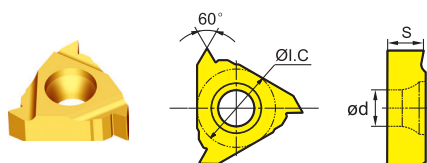
Informazioni tecniche > A501

Dati di taglio > A500

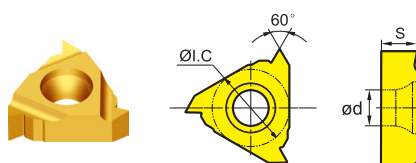
# Inserti per filettatura

| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| <b>16</b> | 9,525 | 3,97 | 4,4 |

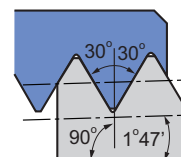
## Filettatura per tubi NPTF autosigillante 60°



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



ASME B1.20.1-1983  
Tolleranza: 2

| ISO | Passo (tpi) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |
|-----|-------------|---------------------|-----------------------|--------|--|--|--|---------------------|-----------------------|--------|--|--|--|
|     |             |                     | YBG201                | YBG205 |  |  |  |                     | YBG201                | YBG205 |  |  |  |
| 16  | 8,00        | -                   |                       |        |  |  |  | RT16.01N-8NPTF      | ○                     |        |  |  |  |
| 16  | 11,50       | RT16.01W-11.5NPTF   | ○                     |        |  |  |  | RT16.01N-11.5NPTF   | ○                     |        |  |  |  |
| 16  | 14,00       | RT16.01W-14NPTF     | ○                     |        |  |  |  | RT16.01N-14NPTF     | ○                     |        |  |  |  |
| 16  | 18,00       | RT16.01W-18NPTF     | ○                     |        |  |  |  | RT16.01N-18NPTF     | ○                     |        |  |  |  |
| 16  | 27,00       | -                   |                       |        |  |  |  | RT16.01N-27NPTF     | ○                     |        |  |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

### Utensile

| SWR/L | SNR/L |
|-------|-------|
|       |       |
| A493  | A495  |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni  
tecniche

E

Indice

Codice sistema &gt; A466

Scelta gradi &gt; A465

Informazioni tecniche &gt; A501

Dati di taglio &gt; A500

A

Inserti per filettatura

| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| 16        | 9,525 | 3,97 | 4,4 |

Tornitura

B

Fresatura

C

Foratura

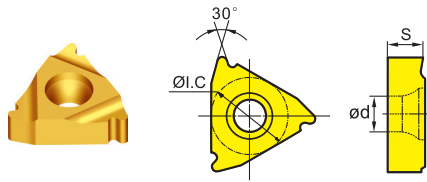
D

Informazioni tecniche

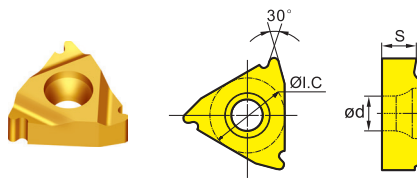
E

Indice

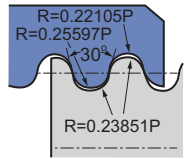
Filettatura tonda R 30°



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



DIN 405  
Tolleranza: 7

| ISO | Passo (tpi) | Lavorazione esterna | HC¹ (PVD) |        |  |  |  |  | Lavorazione interna | HC¹ (PVD) |        |  |  |  |  |
|-----|-------------|---------------------|-----------|--------|--|--|--|--|---------------------|-----------|--------|--|--|--|--|
|     |             |                     | YBG201    | YBG205 |  |  |  |  |                     | YBG201    | YBG205 |  |  |  |  |
| 16  | 6,00        | RT16.01W-6R         | ○         |        |  |  |  |  | RT16.01N-6R         | ○         | ○      |  |  |  |  |
| 16  | 8,00        | RT16.01W-8R         | ○         |        |  |  |  |  | RT16.01N-8R         | ○         | ○      |  |  |  |  |
| 16  | 10,00       | RT16.01W-10R        | ○         |        |  |  |  |  | RT16.01N-10R        | ○         | ○      |  |  |  |  |

● In magazzino ○ Su richiesta

HC¹ Carburo cementato rivestito

C

Foratura

D

Informazioni tecniche

E

Indice

Utensile

SWR/L

SNR/L



A493

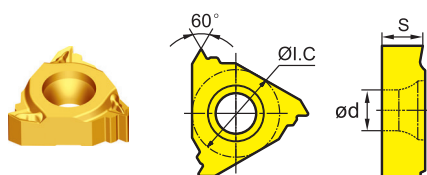
A495



## Inserti per filettatura

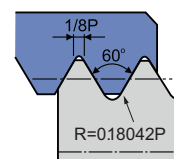
| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| <b>16</b> | 9,525 | 3,97 | 4,4 |

### Filettatura MJ per industria aerospaziale



Versione destra esterna

Versione sinistra interna



ISO 5855-1999

Tolleranza: 4

| ISO | Passo (mm) | Lavorazione esterna    | HC <sup>1</sup> (PVD) |        |  |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |  |
|-----|------------|------------------------|-----------------------|--------|--|--|--|--|---------------------|-----------------------|--------|--|--|--|--|
|     |            |                        | YBG201                | YBG205 |  |  |  |  |                     | YBG201                | YBG205 |  |  |  |  |
| 16  | 1,50       | <b>RT16.01W-1.50MJ</b> | ○                     |        |  |  |  |  | -                   |                       |        |  |  |  |  |
| 16  | 2,00       | <b>RT16.01W-2.00MJ</b> | ○                     |        |  |  |  |  | -                   |                       |        |  |  |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

#### Utensile

SWR/L



A493

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni  
tecniche

**E**

Indice

Codice sistema > A466

Scelta gradi > A465

Informazioni tecniche > A501

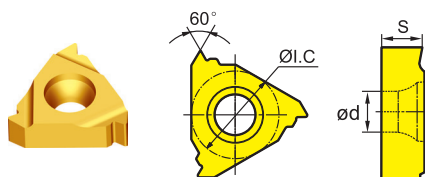
Dati di taglio > A500

A

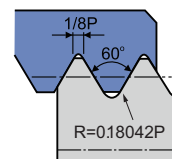
## Inserti per filettatura

| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| 16        | 9,525 | 3,97 | 4,4 |

Tornitura



Versione destra esterna  
Versione sinistra interna



ISO 3161-1999  
Tolleranza: 3A

B

Fresatura

| ISO | Passo (tpi) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |  |
|-----|-------------|---------------------|-----------------------|--------|--|--|--|--|---------------------|-----------------------|--------|--|--|--|--|
|     |             |                     | YBG201                | YBG205 |  |  |  |  |                     | YBG201                | YBG205 |  |  |  |  |
| 16  | 10,00       | RT16.01W-10UNJ      | ○                     |        |  |  |  |  | -                   |                       |        |  |  |  |  |
| 16  | 12,00       | RT16.01W-12UNJ      | ○                     |        |  |  |  |  | -                   |                       |        |  |  |  |  |
| 16  | 14,00       | RT16.01W-14UNJ      | ○                     |        |  |  |  |  | -                   |                       |        |  |  |  |  |
| 16  | 18,00       | RT16.01W-18UNJ      | ○                     |        |  |  |  |  | -                   |                       |        |  |  |  |  |
| 16  | 20,00       | RT16.01W-20UNJ      | ○                     |        |  |  |  |  | -                   |                       |        |  |  |  |  |
| 16  | 24,00       | RT16.01W-24UNJ      | ○                     |        |  |  |  |  | -                   |                       |        |  |  |  |  |
| 16  | 28,00       | RT16.01W-28UNJ      | ○                     |        |  |  |  |  | -                   |                       |        |  |  |  |  |
| 16  | 32,00       | RT16.01W-32UNJ      | ○                     |        |  |  |  |  | -                   |                       |        |  |  |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

C

Foratura

### Utensile

SWR/L



A493

D

Informazioni tecniche

E

Indice

Codice sistema > A466

Scelta gradi > A465

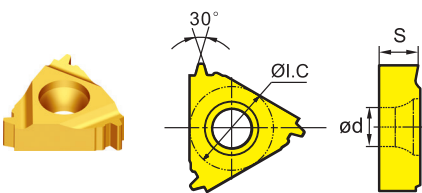
Informazioni tecniche > A501

Dati di taglio > A500

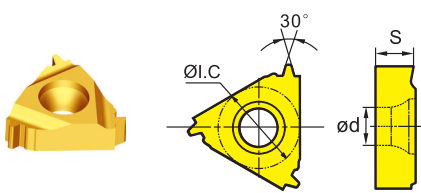
## Inserti per filettatura

| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| <b>16</b> | 9,525 | 3,97 | 4,4 |

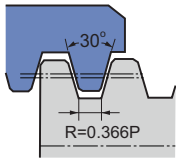
### Filettatura metrica ISO trapezoidale TR 30°



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



ISO 2901-2904  
Tolleranza: 7

| ISO | Passo (mm) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |
|-----|------------|---------------------|-----------------------|--------|--|--|--|---------------------|-----------------------|--------|--|--|--|
|     |            |                     | YBG201                | YBG205 |  |  |  |                     | YBG201                | YBG205 |  |  |  |
| 16  | 1,50       | RT16.01W-1.50TR     | ○                     |        |  |  |  | RT16.01N-1.50TR     | ●                     |        |  |  |  |
| 16  | 2,00       | RT16.01W-2.00TR     | ○                     | ○      |  |  |  | RT16.01N-2.00TR     | ○                     | ○      |  |  |  |
| 16  | 3,00       | RT16.01W-3.00TR     | ○                     | ○      |  |  |  | RT16.01N-3.00TR     | ○                     | ●      |  |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

| Utensile                                                                            |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SWR/L                                                                               | SNR/L                                                                               |
|  |  |
| A493                                                                                | A495                                                                                |

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni  
tecniche

**E**

Indice

A

Inserti per filettatura

| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| 16        | 9,525 | 3,97 | 4,4 |

Tornitura

B

Fresatura

C

Foratura

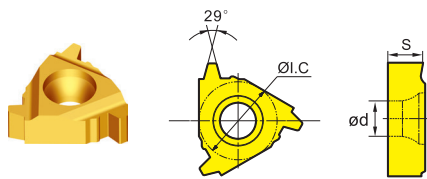
D

Informazioni tecniche

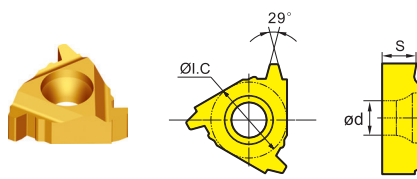
E

Indice

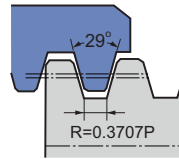
Filettatura americana 29° trapezoidale ACME



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



ANSI B1.5-1988  
Tolleranza: 2G

| ISO | Passo (tpi) | Lavorazione esterna | HC¹ (PVD) |        |  |  |  | Lavorazione interna | HC¹ (PVD) |        |  |  |  |
|-----|-------------|---------------------|-----------|--------|--|--|--|---------------------|-----------|--------|--|--|--|
|     |             |                     | YBG201    | YBG205 |  |  |  |                     | YBG201    | YBG205 |  |  |  |
| 16  | 8,00        | RT16.01W-8AC        | ○         |        |  |  |  | RT16.01N-8AC        | ○         |        |  |  |  |
| 16  | 10,00       | RT16.01W-10AC       | ○         |        |  |  |  | RT16.01N-10AC       | ○         |        |  |  |  |
| 16  | 12,00       | RT16.01W-12AC       | ○         |        |  |  |  | RT16.01N-12AC       | ○         |        |  |  |  |
| 16  | 14,00       | RT16.01W-14AC       | ○         |        |  |  |  | RT16.01N-14AC       | ○         |        |  |  |  |
| 16  | 16,00       | RT16.01W-16AC       | ○         |        |  |  |  | RT16.01N-16AC       | ○         |        |  |  |  |

● In magazzino ○ Su richiesta

HC¹ Carburo cementato rivestito

Utensile

| SWR/L | SNR/L |
|-------|-------|
|       |       |
| A493  | A495  |

## Inserti per filettatura

| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| <b>16</b> | 9,525 | 3,97 | 4,4 |

### Filettatura americana trapezoidale piatta STUB-ACME

Versione destra esterna  
Versione sinistra interna

Versione destra interna  
Versione sinistra esterna

ANSI B1.8-1988  
Tolleranza: Standard API

| ISO | Passo (tpi) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |
|-----|-------------|---------------------|-----------------------|--------|--|--|--|---------------------|-----------------------|--------|--|--|--|
|     |             |                     | YBG201                | YBG205 |  |  |  |                     | YBG201                | YBG205 |  |  |  |
| 16  | 8,00        | RT16.01W-8STAC      | ○                     |        |  |  |  | RT16.01N-8STAC      | ○                     |        |  |  |  |
| 16  | 10,00       | RT16.01W-10STAC     | ○                     |        |  |  |  | RT16.01N-10STAC     | ○                     |        |  |  |  |
| 16  | 12,00       | RT16.01W-12STAC     | ○                     |        |  |  |  | RT16.01N-12STAC     | ○                     |        |  |  |  |
| 16  | 14,00       | RT16.01W-14STAC     | ○                     |        |  |  |  | RT16.01N-14STAC     | ○                     |        |  |  |  |
| 16  | 16,00       | RT16.01W-16STAC     | ○                     |        |  |  |  | RT16.01N-16STAC     | ○                     |        |  |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

| Utensile                                                                            |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SWR/L                                                                               | SNR/L                                                                               |
|  |  |
| A493                                                                                | A495                                                                                |

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni  
tecniche

**E**

Indice

Codice sistema > A466

Scelta gradi > A465

Informazioni tecniche > A501

Dati di taglio > A500

A

Inserti per filettatura

| R/LT**N/W | I.C  | S    | d   |
|-----------|------|------|-----|
| 22        | 12,7 | 5,56 | 5,5 |

Tornitura

B

Fresatura

C

Foratura

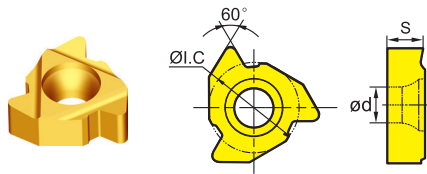
D

Informazioni tecniche

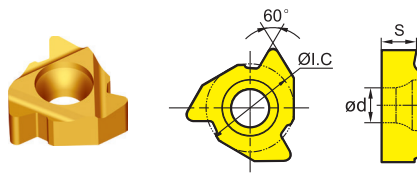
E

Indice

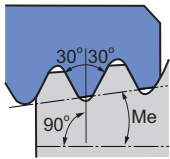
Filettatura API 60°



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



Me = conico, 2i.p.f-4°46', 3i.p.f-7°01'  
API SPEC7:1990 Tolleranza: Standard API

| ISO | Passo (tpi) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |  |
|-----|-------------|---------------------|-----------------------|--------|--|--|--|--|---------------------|-----------------------|--------|--|--|--|--|
|     |             |                     | YBG201                | YBG205 |  |  |  |  |                     | YBG201                | YBG205 |  |  |  |  |
| 22  | 4,00        | RT22.01W-4AP382     | ○                     |        |  |  |  |  | RT22.01N-4AP382     | ○                     |        |  |  |  |  |
| 22  |             | RT22.01W-4AP383     | ○                     |        |  |  |  |  | RT22.01N-4AP383     | ○                     |        |  |  |  |  |
| 22  |             | RT22.01W-4AP502     | ○                     |        |  |  |  |  | RT22.01N-4AP502     | ○                     |        |  |  |  |  |
| 22  |             | RT22.01W-4AP503     | ○                     |        |  |  |  |  | RT22.01N-4AP503     | ○                     |        |  |  |  |  |
| 22  | 5,00        | RT22.01W-5AP403     | ○                     |        |  |  |  |  | RT22.01N-5AP403     | ○                     |        |  |  |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

C

Foratura

D

Informazioni tecniche

E

Indice

Utensile

SWR/L

SNR/L



A493



A495

Codice sistema > A466

Scelta gradi > A465

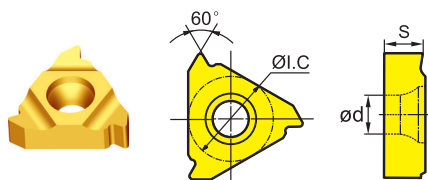
Informazioni tecniche > A501

Dati di taglio > A500

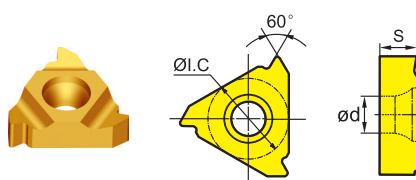
## Inserti per filettatura

| R/LT**N/W | I.C   | S    | d   |
|-----------|-------|------|-----|
| <b>16</b> | 9,525 | 3,97 | 4,4 |
| <b>22</b> | 12,7  | 5,56 | 5,5 |

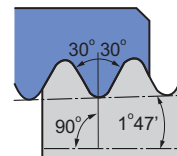
### Filettatura tonda API



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



API spec.5B  
Tolleranza: API RD

| ISO | Passo (tpi) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |
|-----|-------------|---------------------|-----------------------|--------|--|--|--|---------------------|-----------------------|--------|--|--|--|
|     |             |                     | YBG201                | YBG205 |  |  |  |                     | YBG201                | YBG205 |  |  |  |
| 16  | 8,00        | RT16.01W-8RD        | ○                     |        |  |  |  | RT16.01N-8RD        | ○                     |        |  |  |  |
| 16  | 10,00       | RT16.01W-10RD       | ○                     |        |  |  |  | RT16.01N-10RD       | ○                     |        |  |  |  |
| 22  | 8,00        | RT22.01W-8RD        | ○                     |        |  |  |  | RT22.01N-8RD        | ○                     |        |  |  |  |
| 22  | 10,00       | RT22.01W-10RD       | ○                     |        |  |  |  | RT22.01N-10RD       | ○                     |        |  |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

### Utensile

| SWR/L | SNR/L |
|-------|-------|
|       |       |
| A493  | A495  |

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni  
tecniche

**E**

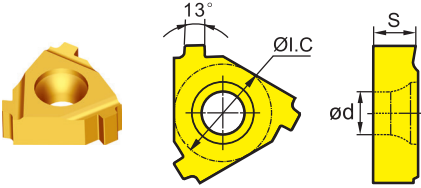
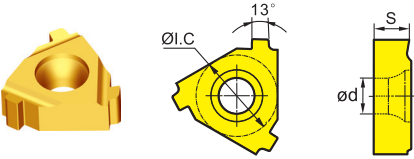
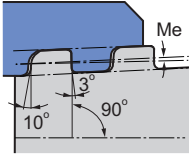
Indice

A

Inserti per filettatura

| R/LT**N/W | I.C  | S    | d   |
|-----------|------|------|-----|
| 22        | 12,7 | 5,56 | 5,5 |

Tornitura

| Filettatura americana a dente di sega API                                         |             |                     |                                                                                    |        |  |                                                                                                         |                                 |        |  |
|-----------------------------------------------------------------------------------|-------------|---------------------|------------------------------------------------------------------------------------|--------|--|---------------------------------------------------------------------------------------------------------|---------------------------------|--------|--|
|  |             |                     |  |        |  |                      |                                 |        |  |
| Versione destra esterna<br>Versione sinistra interna                              |             |                     | Versione destra interna<br>Versione sinistra esterna                               |        |  | Me=conico 3/4i.p.f-1°47'-1°47' per Ø 4 1/2-13 3/8<br>1 i.p.f--2°23' per Ø16 SEPC.5B.1979 Tol.: Std. API |                                 |        |  |
| ISO                                                                               | Passo (tpi) | Lavorazione esterna | HC¹ (PVD)                                                                          |        |  | Lavorazione interna                                                                                     | HC¹ (PVD)                       |        |  |
|                                                                                   |             |                     | YBG201                                                                             | YBG205 |  |                                                                                                         | YBG201                          | YBG205 |  |
| 22                                                                                | 5,00        | RT22.01W-5BUT       | ○                                                                                  |        |  | RT22.01N-5BUT                                                                                           | ○                               |        |  |
| ● In magazzino ○ Su richiesta                                                     |             |                     |                                                                                    |        |  |                                                                                                         | HC¹ Carburo cementato rivestito |        |  |

B

Fresatura

C

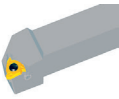
Foratura

D

Informazioni tecniche

E

Indice

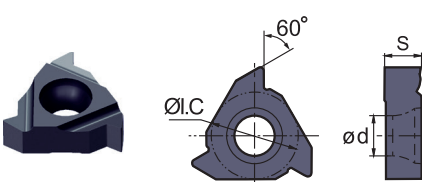
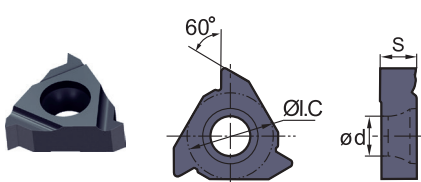
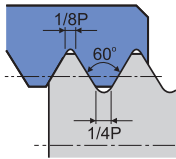
| Utensile                                                                            |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SWR/L                                                                               | SNR/L                                                                               |
|  |  |
| A493                                                                                | A495                                                                                |



**Inserti per filettatura (spessore ISO)**

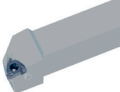
| R/LT**N/W | I.C   | S    | d |
|-----------|-------|------|---|
| <b>16</b> | 9,525 | 3,52 | 4 |

**Filettatura ISO-Metrica standard 60° Profilo completo (spessore ISO)**

|  |            |                     |  |        |  |  |  |                     |                       |        |  |  |  |
|-----------------------------------------------------------------------------------|------------|---------------------|------------------------------------------------------------------------------------|--------|--|-------------------------------------------------------------------------------------|--|---------------------|-----------------------|--------|--|--|--|
| Versione destra esterna<br>Versione sinistra interna                              |            |                     | Versione destra interna<br>Versione sinistra esterna                               |        |  | ISO 965-1980 DIN 13<br>GB-T 197-2003 Tolleranza: 6g/6H                              |  |                     |                       |        |  |  |  |
| ISO                                                                               | Passo (mm) | Lavorazione esterna | HC <sup>1</sup> (PVD)                                                              |        |  |                                                                                     |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |
|                                                                                   |            |                     | YBG202                                                                             | YBG205 |  |                                                                                     |  |                     | YBG202                | YBG205 |  |  |  |
| 16                                                                                | 0,50       | RT16.01W-0.50GMB    | ○                                                                                  | ○      |  |                                                                                     |  | RT16.01N-0.50GMB    | ○                     | ○      |  |  |  |
| 16                                                                                | 0,75       | RT16.01W-0.75GMB    | ○                                                                                  | ○      |  |                                                                                     |  | RT16.01N-0.75GMB    | ○                     | ○      |  |  |  |
| 16                                                                                | 1,00       | RT16.01W-1.00GMB    | ○                                                                                  | ○      |  |                                                                                     |  | RT16.01N-1.00GMB    | ○                     | ○      |  |  |  |
| 16                                                                                |            | -                   |                                                                                    |        |  |                                                                                     |  | RT16.01N-1.00GMPB   | ○                     |        |  |  |  |
| 16                                                                                | 1,25       | RT16.01W-1.25GMB    | ○                                                                                  | ○      |  |                                                                                     |  | RT16.01N-1.25GMB    | ○                     | ○      |  |  |  |
| 16                                                                                | 1,50       | RT16.01W-1.50GMB    | ○                                                                                  | ○      |  |                                                                                     |  | RT16.01N-1.50GMB    | ○                     |        |  |  |  |
| 16                                                                                |            | RT16.01W-1.50GMPB*  | ○                                                                                  | ○      |  |                                                                                     |  | -                   |                       |        |  |  |  |
| 16                                                                                | 1,75       | RT16.01W-1.75GMB    | ○                                                                                  | ○      |  |                                                                                     |  | RT16.01N-1.75GMB    | ○                     | ○      |  |  |  |
| 16                                                                                | 2,00       | RT16.01W-2.00GMB    | ○                                                                                  | ○      |  |                                                                                     |  | RT16.01N-2.00GMB    | ○                     | ○      |  |  |  |
| 16                                                                                |            | -                   |                                                                                    |        |  |                                                                                     |  | RT16.01N-2.00GMPB*  | ○                     | ○      |  |  |  |
| 16                                                                                | 2,50       | RT16.01W-2.50GMB    | ○                                                                                  | ○      |  |                                                                                     |  | RT16.01N-2.50GMB    | ○                     | ○      |  |  |  |
| 16                                                                                | 3,00       | RT16.01W-3.00GMB    | ○                                                                                  | ○      |  |                                                                                     |  | RT16.01N-3.00GMB    | ○                     | ○      |  |  |  |
| 16                                                                                |            | -                   |                                                                                    |        |  |                                                                                     |  | RT16.01N-3.00GMPB*  | ○                     |        |  |  |  |

● In magazzino ○ Su richiesta  
PB\*: Inserti con rompitrucoli

HC<sup>1</sup> Carburo cementato rivestito

| Utensile                                                                            |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SWR                                                                                 | SNR                                                                                 |
|  |  |
| A497                                                                                | A498                                                                                |

Codice sistema &gt; A466

Scelta gradi &gt; A465

Informazioni tecniche &gt; A501

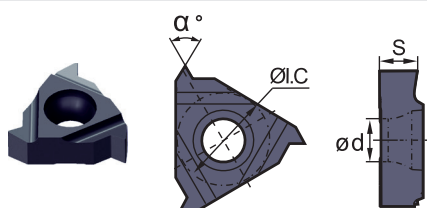
Dati di taglio &gt; A500

A

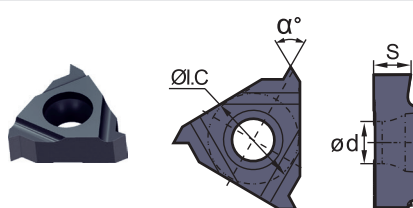
## Inserti per filettatura (spessore ISO)

| R/LT**N/W | I.C   | S    | d |
|-----------|-------|------|---|
| <b>16</b> | 9,525 | 3,52 | 4 |

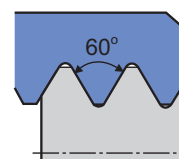
Tornitura



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



B

Fresatura

| ISO | Passo (mm)  | Lavorazione esterna     | HC <sup>1</sup> (PVD) |        |  |  |  |  | Lavorazione interna   | HC <sup>1</sup> (PVD) |        |  |  |  |  |
|-----|-------------|-------------------------|-----------------------|--------|--|--|--|--|-----------------------|-----------------------|--------|--|--|--|--|
|     |             |                         | YBG202                | YBG205 |  |  |  |  |                       | YBG202                | YBG205 |  |  |  |  |
| 16  | 0,50 - 1,50 | <b>RT16.01W-A60B</b>    | ○                     |        |  |  |  |  | <b>RT16.01N-A60B</b>  | ○                     |        |  |  |  |  |
| 16  | 0,50 - 3,00 | <b>RT16.01W-AG60B</b>   | ○                     |        |  |  |  |  | <b>RT16.01N-AG60B</b> | ○                     |        |  |  |  |  |
| 16  |             | <b>RT16.01W-AG60PB*</b> | ○                     |        |  |  |  |  | -                     |                       |        |  |  |  |  |
| 16  | 1,75 - 3,00 | <b>RT16.01W-G60B</b>    | ○                     |        |  |  |  |  | <b>RT16.01N-G60B</b>  | ○                     |        |  |  |  |  |

● In magazzino ○ Su richiesta  
PB\*: Inserti con rompitrucioli

HC<sup>1</sup> Carburo cementato rivestito

C

Foratura

| Utensile |      |
|----------|------|
| SWR      | SNR  |
|          |      |
| A497     | A498 |

D

Informazioni tecniche

E

Indice

Codice sistema > A466

Scelta gradi > A465

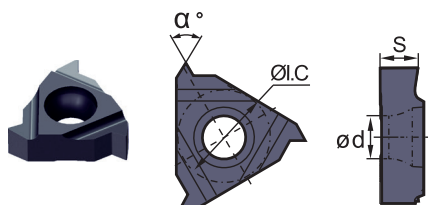
Informazioni tecniche > A501

Dati di taglio > A500

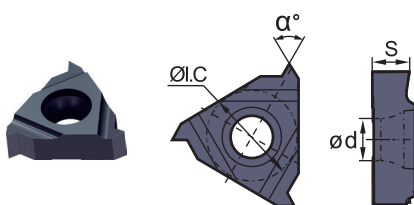
## Inserti per filettatura (spessore ISO)

| R/LT**N/W | I.C   | S    | d |
|-----------|-------|------|---|
| <b>16</b> | 9,525 | 3,52 | 4 |

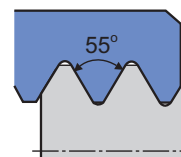
### 55° Profilo parziale (spessore ISO)



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



| ISO | Passo (tpi) | Lavorazione esterna    | HC <sup>1</sup> (PVD) |        |  |  |  |  | Lavorazione interna   | HC <sup>1</sup> (PVD) |        |  |  |  |  |
|-----|-------------|------------------------|-----------------------|--------|--|--|--|--|-----------------------|-----------------------|--------|--|--|--|--|
|     |             |                        | YBG202                | YBG205 |  |  |  |  |                       | YBG202                | YBG205 |  |  |  |  |
| 16  | 48 - 16     | <b>RT16.01W-A55B</b>   | ○                     |        |  |  |  |  | <b>RT16.01N-A55B</b>  | ○                     |        |  |  |  |  |
| 16  | 48 - 8      | <b>RT16.01W-AG55B</b>  | ○                     |        |  |  |  |  | <b>RT16.01N-AG55B</b> | ○                     |        |  |  |  |  |
| 16  |             | <b>RT16.01W-AG55PB</b> | ○                     | ○      |  |  |  |  | -                     |                       |        |  |  |  |  |
| 16  | 14 - 8      | <b>RT16.01W-G55B</b>   | ○                     |        |  |  |  |  | <b>RT16.01N-G55B</b>  | ○                     |        |  |  |  |  |

● In magazzino ○ Su richiesta  
PB\*: Inserti con rompitrucoli

HC<sup>1</sup> Carburo cementato rivestito

### Utensile

| SWR  | SNR  |
|------|------|
|      |      |
| A497 | A498 |

**A**

Tornitura

**B**

Fresatura

**C**

Foratura

**D**

Informazioni  
tecniche

**E**

Indice

Codice sistema > A466

Scelta gradi > A465

Informazioni tecniche > A501

Dati di taglio > A500

A

## Inserti per filettatura (spessore ISO)

| R/LT**N/W | I.C   | S    | d |
|-----------|-------|------|---|
| 16        | 9,525 | 3,52 | 4 |

Tornitura

B

Fresatura

C

Foratura

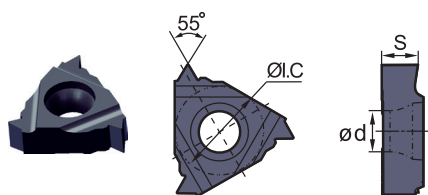
D

Informazioni tecniche

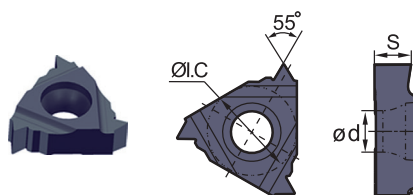
E

Indice

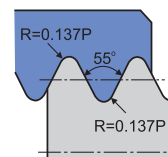
### Whitworth (spessore ISO)



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



ISO 965-1980 DIN 13  
GB-T 197-2003 Tolleranza: Classe A media

| ISO | Passo (tpi) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |  |
|-----|-------------|---------------------|-----------------------|--------|--|--|--|--|---------------------|-----------------------|--------|--|--|--|--|
|     |             |                     | YBG202                | YBG205 |  |  |  |  |                     | YBG202                | YBG205 |  |  |  |  |
| 16  | 8,00        | RT16.01W-8WB        | ○                     |        |  |  |  |  | RT16.01N-8WB        | ○                     |        |  |  |  |  |
| 16  | 9,00        | RT16.01W-9WB        | ○                     |        |  |  |  |  | RT16.01N-9WB        | ○                     |        |  |  |  |  |
| 16  | 10,00       | RT16.01W-10WB       | ○                     |        |  |  |  |  | RT16.01N-10WB       | ○                     |        |  |  |  |  |
| 16  | 11,00       | RT16.01W-11WB       | ○                     | ○      |  |  |  |  | RT16.01N-11WB       | ○                     |        |  |  |  |  |
| 16  |             | -                   |                       |        |  |  |  |  | RT16.01N-11WPB      | ○                     |        |  |  |  |  |
| 16  | 12,00       | RT16.01W-12WB       | ○                     |        |  |  |  |  | RT16.01N-12WB       | ○                     |        |  |  |  |  |
| 16  |             | RT16.01W-14WB       | ○                     |        |  |  |  |  | RT16.01N-14WB       | ○                     |        |  |  |  |  |
| 16  | 14,00       | -                   |                       |        |  |  |  |  | RT16.01N-14WPB*     | ○                     |        |  |  |  |  |
| 16  | 16,00       | RT16.01W-16WB       | ○                     |        |  |  |  |  | RT16.01N-16WB       | ○                     | ○      |  |  |  |  |

● In magazzino ○ Su richiesta  
PB\*: Inserti con rompitrucioli

HC<sup>1</sup> Carburo cementato rivestito

### Utensile

| SWR  | SNR  |
|------|------|
|      |      |
| A497 | A498 |

Codice sistema > A466

Scelta gradi > A465

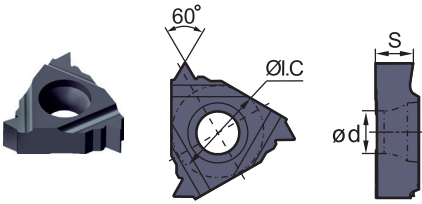
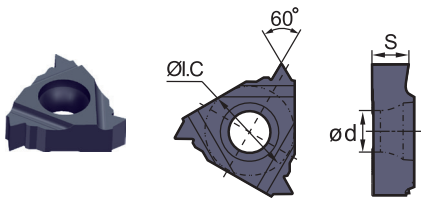
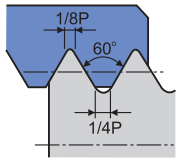
Informazioni tecniche > A501

Dati di taglio > A500

**Inserti per filettatura (spessore ISO)**

| R/LT**N/W | I.C   | S    | d |
|-----------|-------|------|---|
| <b>16</b> | 9,525 | 3,52 | 4 |

**Profilo completo UN Americano Filettatura 60° (spessore ISO)**

|  |             |                     |  |        |  |  |  |                     |                       |        |  |  |  |
|-----------------------------------------------------------------------------------|-------------|---------------------|------------------------------------------------------------------------------------|--------|--|-------------------------------------------------------------------------------------|--|---------------------|-----------------------|--------|--|--|--|
| Versione destra esterna<br>Versione sinistra interna                              |             |                     | Versione destra interna<br>Versione sinistra esterna                               |        |  | ASME B1.1-1989<br>Tolleranza: 2A/2B                                                 |  |                     |                       |        |  |  |  |
| ISO                                                                               | Passo (tpi) | Lavorazione esterna | HC <sup>1</sup> (PVD)                                                              |        |  |                                                                                     |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |
|                                                                                   |             |                     | YBG202                                                                             | YBG205 |  |                                                                                     |  |                     | YBG202                | YBG205 |  |  |  |
| 16                                                                                | 8,00        | RT16.01W-8UNB       | ○                                                                                  |        |  |                                                                                     |  | RT16.01N-8UNB       | ○                     |        |  |  |  |
| 16                                                                                | 10,00       | RT16.01W-10UNB      | ○                                                                                  |        |  |                                                                                     |  | RT16.01N-10UNB      | ○                     |        |  |  |  |
| 16                                                                                | 12,00       | RT16.01W-12UNB      | ○                                                                                  |        |  |                                                                                     |  | RT16.01N-12UNB      | ○                     |        |  |  |  |
| 16                                                                                | 14,00       | RT16.01W-14UNB      | ○                                                                                  |        |  |                                                                                     |  | RT16.01N-14UNB      | ○                     |        |  |  |  |
| 16                                                                                | 16,00       | RT16.01W-16UNB      | ○                                                                                  |        |  |                                                                                     |  | RT16.01N-16UNB      | ○                     |        |  |  |  |
| 16                                                                                | 18,00       | RT16.01W-18UNB      | ○                                                                                  |        |  |                                                                                     |  | RT16.01N-18UNB      | ○                     |        |  |  |  |
| 16                                                                                | 20,00       | RT16.01W-20UNB      | ○                                                                                  |        |  |                                                                                     |  | RT16.01N-20UNB      | ○                     |        |  |  |  |
| 16                                                                                | 24,00       | -                   |                                                                                    |        |  |                                                                                     |  | RT16.01N-24UNB      | ○                     |        |  |  |  |

● In magazzino ○ Su richiesta

HC<sup>1</sup> Carburo cementato rivestito

| Utensile                                                                            |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SWR                                                                                 | SNR                                                                                 |
|  |  |
| A497                                                                                | A498                                                                                |

A

Inserti per filettatura (spessore ISO)

| R/LT**N/W | I.C   | S    | d |
|-----------|-------|------|---|
| 16        | 9,525 | 3,52 | 4 |

Tornitura

B

Fresatura

C

Foratura

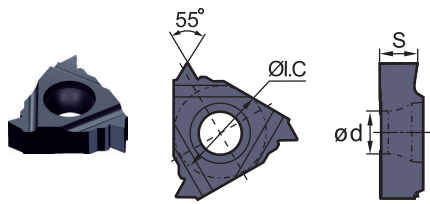
D

Informazioni tecniche

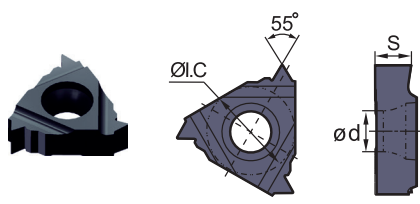
E

Indice

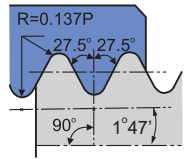
Filettatura BSPT conica per tubi (spessore ISO)



Versione destra esterna  
Versione sinistra interna



Versione destra interna  
Versione sinistra esterna



ASME B1.1-1989  
BSPT standard

| ISO | Passo (tpi) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |  |
|-----|-------------|---------------------|-----------------------|--------|--|--|--|--|---------------------|-----------------------|--------|--|--|--|--|
|     |             |                     | YBG202                | YBG205 |  |  |  |  |                     | YBG202                | YBG205 |  |  |  |  |
| 16  | 11,00       | RT16.01W-11BSPTB    | ○                     | ○      |  |  |  |  | RT16.01N-11BSPTB    | ○                     | ○      |  |  |  |  |
| 16  | 14,00       | RT16.01W-14BSPTB    | ○                     |        |  |  |  |  | RT16.01N-14BSPTB    | ○                     |        |  |  |  |  |
| 16  |             | RT16.01W-14BSPTPB*  | ○                     |        |  |  |  |  | RT16.01N-14BSPTPB*  | ○                     | ○      |  |  |  |  |
| 16  | 19,00       | RT16.01W-19BSPTB    | ○                     |        |  |  |  |  | RT16.01N-19BSPTB    | ○                     |        |  |  |  |  |
| 16  | 28,00       | RT16.01W-28BSPTB    | ○                     |        |  |  |  |  | RT16.01N-28BSPTB    | ○                     |        |  |  |  |  |

● In magazzino ○ Su richiesta  
PB\*: Inserti con rompitrucioli

HC<sup>1</sup> Carburo cementato rivestito

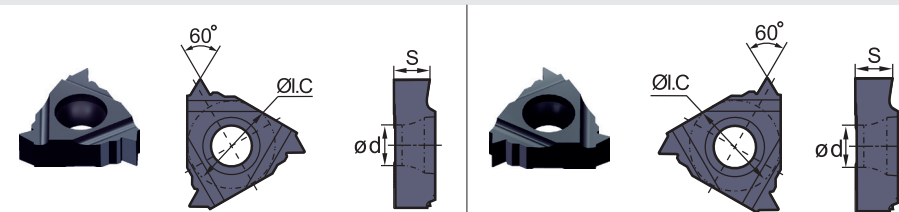
Indice

| Utensile |      |
|----------|------|
| SWR      | SNR  |
|          |      |
| A497     | A498 |

## Inserti per filettatura (spessore ISO)

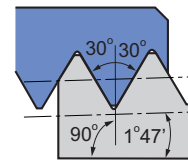
| R/LT**N/W | I.C   | S    | d |
|-----------|-------|------|---|
| <b>16</b> | 9,525 | 3,52 | 4 |

### Filettatura NPT per tubi (spessore ISO)



Versione destra esterna  
Versione sinistra interna

Versione destra interna  
Versione sinistra esterna

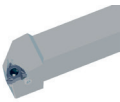


ASME B1.20.1-1983  
NPT standard

| ISO | Passo (tpi) | Lavorazione esterna | HC <sup>1</sup> (PVD) |        |  |  |  | Lavorazione interna | HC <sup>1</sup> (PVD) |        |  |  |  |
|-----|-------------|---------------------|-----------------------|--------|--|--|--|---------------------|-----------------------|--------|--|--|--|
|     |             |                     | YBG202                | YBG205 |  |  |  |                     | YBG202                | YBG205 |  |  |  |
| 16  | 8,00        | RT16.01W-8NPTB      | ○                     |        |  |  |  | RT16.01N-8NPTB      | ○                     |        |  |  |  |
| 16  | 11,50       | RT16.01W-11.5NPTB   | ○                     |        |  |  |  | RT16.01N-11.5NPTB   | ○                     |        |  |  |  |
| 16  |             | -                   |                       |        |  |  |  | RT16.01N-11.5NPTPB* | ○                     |        |  |  |  |
| 16  | 14,00       | RT16.01W-14NPTB     | ○                     | ○      |  |  |  | RT16.01N-14NPTB     | ○                     |        |  |  |  |
| 16  |             | -                   |                       |        |  |  |  | RT16.01N-14NPTPB*   | ○                     | ○      |  |  |  |
| 16  | 18,00       | RT16.01W-18NPTB     | ○                     |        |  |  |  | RT16.01N-18NPTB     | ○                     |        |  |  |  |
| 16  | 27,00       | RT16.01W-27NPTB     | ○                     |        |  |  |  | RT16.01N-27NPTB     | ○                     |        |  |  |  |

● In magazzino ○ Su richiesta  
PB\*: Inserti con rompitruccioli

HC<sup>1</sup> Carburo cementato rivestito

| Utensile                                                                            |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SWR                                                                                 | SNR                                                                                 |
|  |  |
| A497                                                                                | A498                                                                                |

**S W R 20 20 K 16 (B)**

**1 2 3 4 5 6 7 8**

Tornitura

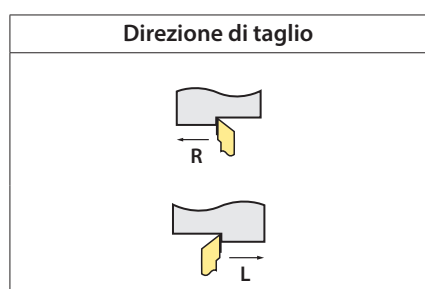
| Sistema di bloccaggio |                     |                                                                                   |
|-----------------------|---------------------|-----------------------------------------------------------------------------------|
| Code                  | Descrizione         |                                                                                   |
| S                     | Bloccaggio a vite   |  |
| C                     | Bloccaggio a staffa |  |

**1**

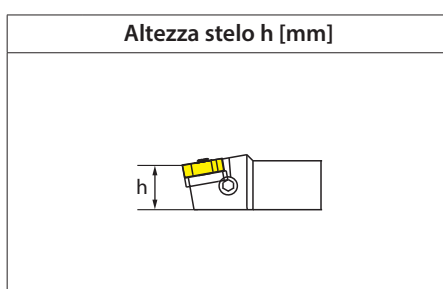
| Tipo lavorazione |                                   |
|------------------|-----------------------------------|
| Code             | Descrizione                       |
| W                | Portautensile filettatura esterna |
| N                | Portautensile filettatura interna |
|                  |                                   |
|                  |                                   |
|                  |                                   |

**2**

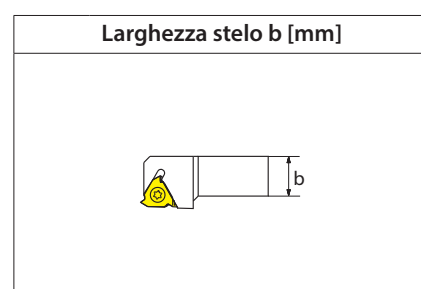
Fresatura



**3**

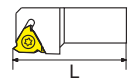


**4**



**5**

Foratura

| Lunghezza stelo L [mm]                                                              |     |
|-------------------------------------------------------------------------------------|-----|
|  |     |
| Code                                                                                | L   |
| H                                                                                   | 100 |
| K                                                                                   | 125 |
| M                                                                                   | 150 |
| P                                                                                   | 170 |
| Q                                                                                   | 180 |
| R                                                                                   | 200 |
| S                                                                                   | 250 |
| T                                                                                   | 300 |

**6**

| Dimensioni inserto [mm] |         |
|-------------------------|---------|
| Code                    | Altezza |
| 11                      | 6,35    |
| 16                      | 9,525   |
| 22                      | 12,7    |
|                         |         |
|                         |         |
|                         |         |
|                         |         |
|                         |         |
|                         |         |

**7**

Portautensile per inserti per filettatura sottili  
(versione B)

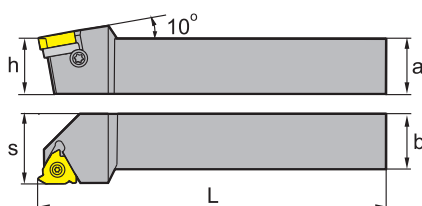
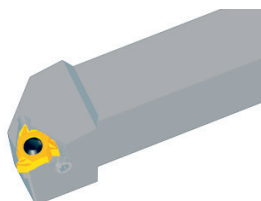
**8**

Indice



## Portautensile per filettatura (esterna)

SWR/L



| Articolo   | * | Stock | Dimensioni [mm] |    |     |    |    | Inserto       |
|------------|---|-------|-----------------|----|-----|----|----|---------------|
|            |   |       | a               | b  | L   | h  | s  |               |
| SWR1616H16 | ● |       | 16              | 16 | 100 | 16 | 20 | RT16.01W-**** |
| SWR2020K16 | ● |       | 20              | 20 | 125 | 20 | 25 | RT16.01W-**** |
| SWR2525M16 | ● |       | 25              | 25 | 150 | 25 | 32 | RT16.01W-**** |
| SWR3225P16 | ● |       | 32              | 25 | 170 | 32 | 32 | RT16.01W-**** |
| SWR3232P16 | ● |       | 32              | 32 | 170 | 32 | 40 | RT16.01W-**** |
| SWR2525M22 | ● |       | 25              | 25 | 150 | 25 | 32 | RT22.01W-**** |
| SWR3225P22 | ● |       | 32              | 25 | 170 | 32 | 32 | RT22.01W-**** |
| SWR3232P22 | ● |       | 32              | 32 | 170 | 32 | 40 | RT22.01W-**** |
| SWR4040S22 | ○ |       | 40              | 40 | 250 | 40 | 50 | RT22.01W-**** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                        |                        |                      |
|-------------------|------------------------|------------------------|----------------------|
|                   | Inserto                | RT16.01W-****          | RT22.01W-****        |
|                   | h                      | 16-32                  | 25-40                |
|                   | Vite                   | I60M3,5x12<br>(2,7 Nm) | I60M5x17<br>(6,7 Nm) |
|                   | Vite (sottoplacchetta) | SM4x8C                 | SM5x8.5C             |
|                   | Sottoplacchetta        | MT16-__M               | MT22-__M             |
|                   | Chiave (vite)          | WT15IP                 | WT20IP               |

| Inserto      |
|--------------|
|              |
| Media Lavor. |
| A467         |

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni  
tecniche

E

Indice

Codice sistema &gt; A492

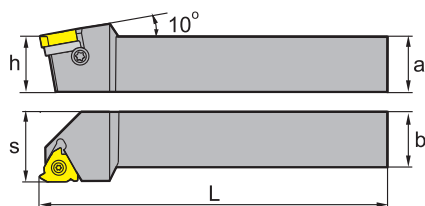
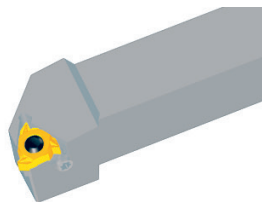
Scelta gradi &gt; A465

Informazioni tecniche &gt; A501

Dati di taglio &gt; A500

## Portautensile per filettatura (esterna)

SWR/L



| Articolo   | * | Stock | Dimensioni [mm] |    |     |    |    | Inserto       |
|------------|---|-------|-----------------|----|-----|----|----|---------------|
|            |   |       | a               | b  | L   | h  | s  |               |
| SWL1616H16 | ● |       | 16              | 16 | 100 | 16 | 20 | LT16.01W-**** |
| SWL2020K16 | ● |       | 20              | 20 | 125 | 20 | 25 | LT16.01W-**** |
| SWL2525M16 | ● |       | 25              | 25 | 150 | 25 | 32 | LT16.01W-**** |
| SWL3225P16 | ● |       | 32              | 25 | 170 | 32 | 32 | LT16.01W-**** |
| SWL3232P16 | ○ |       | 32              | 32 | 170 | 32 | 40 | LT16.01W-**** |
| SWL2525M22 | ● |       | 25              | 25 | 150 | 25 | 32 | LT22.01W-**** |
| SWL3225P22 | ○ |       | 32              | 25 | 170 | 32 | 32 | LT22.01W-**** |
| SWL3232P22 | ● |       | 32              | 32 | 170 | 32 | 40 | LT22.01W-**** |
| SWL4040S22 | ○ |       | 40              | 40 | 250 | 40 | 50 | LT22.01W-**** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                        |                        |                      |
|-------------------|------------------------|------------------------|----------------------|
|                   | Inserto                | LT16.01W-****          | LT22.01W-****        |
|                   | h                      | 16-32                  | 25-40                |
|                   | Vite                   | I60M3,5x12<br>(2,7 Nm) | I60M5x17<br>(6,7 Nm) |
|                   | Vite (sottoplacchetta) | SM4x8C                 | SM5x8.5C             |
|                   | Sottoplacchetta        | MT16-__M               | MT22-__M             |
|                   | Chiave (vite)          | WT15IP                 | WT20IP               |

| Inserto              |
|----------------------|
|                      |
| Media Lavor.<br>A467 |

Codice sistema > A492

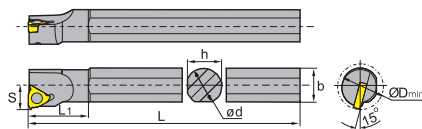
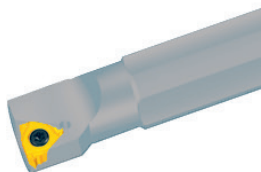
Scelta gradi > A465

Informazioni tecniche > A501

Dati di taglio > A500

**Portautensile per filettatura (interna)**

SNR/L



| Articolo   | * | Stock | Dimensioni [mm] |      |     |    |      |                |                  | Inserto       |
|------------|---|-------|-----------------|------|-----|----|------|----------------|------------------|---------------|
|            |   |       | ød              | b    | L   | h  | s    | L <sub>1</sub> | D <sub>min</sub> |               |
| SNR0016K11 | ● | ●     | 16              | 16   | 125 | 15 | 10   | 20,9           | 12               | RT11.01N-**** |
| SNR0016M11 | ● | ●     | 16              | 15,5 | 150 | 15 | 10,5 | 25,9           | 16               | RT11.01N-**** |
| SNR0016M16 | ● | ●     | 16              | 15,5 | 150 | 15 | 12   | 27             | 20               | RT16.01N-**** |
| SNR0020M16 | ● | ●     | 20              | 19   | 150 | 18 | 14   | 28,7           | 25               | RT16.01N-**** |
| SNR0020Q16 | ● | ●     | 20              | 19   | 180 | 18 | 14   | 34             | 25               | RT16.01N-**** |
| SNR0025M16 | ● | ●     | 25              | 24   | 150 | 23 | 17   | 28,8           | 32               | RT16.01N-**** |
| SNR0032R16 | ● | ●     | 32              | 31   | 200 | 30 | 22   | 30,9           | 40               | RT16.01N-**** |
| SNR0032S16 | ● | ●     | 32              | 31   | 250 | 30 | 22   | 30,9           | 40               | RT16.01N-**** |
| SNR0040T16 | ● | ●     | 40              | 38,5 | 300 | 37 | 27   | 31,5           | 50               | RT16.01N-**** |
| SNR0050U16 | ○ | ○     | 50              | 49,5 | 350 | 49 | 35   | 40,2           | 63               | RT16.01N-**** |
| SNR0020Q22 | ● | ●     | 20              | 21,5 | 180 | 18 | 15   | 35             | 25               | RT22.01N-**** |
| SNR0025R22 | ● | ●     | 25              | 24   | 200 | 23 | 19   | 39             | 32               | RT22.01N-**** |
| SNR0032S22 | ● | ●     | 32              | 31   | 250 | 30 | 22   | 36,4           | 40               | RT22.01N-**** |
| SNR0040T22 | ● | ●     | 40              | 38,5 | 300 | 37 | 27   | 37,2           | 50               | RT22.01N-**** |
| SNR0050U22 | ● | ●     | 50              | 48,5 | 350 | 47 | 35   | 42,6           | 63               | RT22.01N-**** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                        |                         |                       |                        |                      |                      |
|-------------------|------------------------|-------------------------|-----------------------|------------------------|----------------------|----------------------|
|                   | Inserto                | RT11.01N-****           | RT16.01N-****         | RT16.01N-****          | RT22.01N-****        | RT22.01N-****        |
|                   | ød                     | 16                      | 16                    | 20-50                  | 20                   | 25-50                |
|                   | Vite                   | I60M2,5x6,5<br>(1,0 Nm) | I60M3,5x8<br>(2,7 Nm) | I60M3,5x12<br>(2,7 Nm) | I60M5x10<br>(6,7 Nm) | I60M5x17<br>(6,7 Nm) |
|                   | Vite (sottoplacchetta) |                         |                       | SM4x8C                 |                      | SM5x8.5C             |
|                   | Sottoplacchetta        |                         |                       | MT16-__M               |                      | MT22-__M             |
|                   | Chiave (vite)          | WT07IP                  | WT15IP                | WT15IP                 | WT20IP               | WT20IP               |

Inserto

**Media Lavor.**

A467

Codice sistema &gt; A492

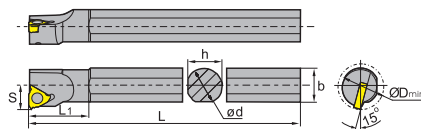
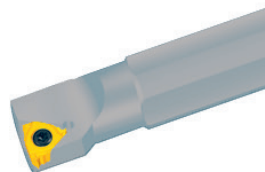
Scelta gradi &gt; A465

Informazioni tecniche &gt; A501

Dati di taglio &gt; A500

## Portautensile per filettatura (interna)

SNR/L



| Articolo   | * | Stock | Dimensioni [mm] |      |     |    |      |                |                  | Inserto       |
|------------|---|-------|-----------------|------|-----|----|------|----------------|------------------|---------------|
|            |   |       | ød              | b    | L   | h  | s    | L <sub>1</sub> | D <sub>min</sub> |               |
| SNL0016K11 |   | ●     | 16              | 16   | 125 | 15 | 10   | 20,9           | 12               | LT11.01N-**** |
| SNL0016M11 |   | ●     | 16              | 15,5 | 150 | 15 | 10,5 | 25,9           | 16               | LT11.01N-**** |
| SNL0016M16 |   | ●     | 16              | 15,5 | 150 | 15 | 12   | 27             | 20               | LT16.01N-**** |
| SNL0020M16 |   | ○     | 20              | 19   | 150 | 18 | 14   | 28,7           | 25               | LT16.01N-**** |
| SNL0020Q16 |   | ●     | 20              | 19   | 180 | 18 | 14   | 34             | 25               | LT16.01N-**** |
| SNL0025M16 |   | ●     | 25              | 24   | 150 | 23 | 17   | 28,8           | 32               | LT16.01N-**** |
| SNL0032R16 |   | ●     | 32              | 31   | 200 | 30 | 22   | 30,9           | 40               | LT16.01N-**** |
| SNL0032S16 |   | ○     | 32              | 31   | 250 | 30 | 22   | 30,9           | 40               | LT16.01N-**** |
| SNL0040T16 |   | ●     | 40              | 38,5 | 300 | 37 | 27   | 31,5           | 50               | LT16.01N-**** |
| SNL0050U16 |   | ○     | 50              | 49,5 | 350 | 49 | 35   | 40,2           | 63               | LT16.01N-**** |
| SNL0020Q22 |   | ●     | 20              | 21,5 | 180 | 18 | 15   | 35             | 25               | LT22.01N-**** |
| SNL0025R22 |   | ○     | 25              | 24   | 200 | 23 | 19   | 39             | 32               | LT22.01N-**** |
| SNL0032S22 |   | ●     | 32              | 31   | 250 | 30 | 22   | 36,4           | 40               | LT22.01N-**** |
| SNL0040T22 |   | ●     | 40              | 38,5 | 300 | 37 | 27   | 37,2           | 50               | LT22.01N-**** |
| SNL0050U22 |   | ●     | 50              | 48,5 | 350 | 47 | 35   | 42,6           | 63               | LT22.01N-**** |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                        |                         |                       |                        |                      |                      |
|-------------------|------------------------|-------------------------|-----------------------|------------------------|----------------------|----------------------|
|                   | Inserto                | LT11.01N-****           | LT16.01N-****         | LT16.01N-****          | LT22.01N-****        | LT22.01N-****        |
|                   | ød                     | 16                      | 16                    | 20-50                  | 20                   | 25-50                |
|                   | Vite                   | I60M2,5×6,5<br>(1,0 Nm) | I60M3,5×8<br>(2,7 Nm) | I60M3,5×12<br>(2,7 Nm) | I60M5×10<br>(6,7 Nm) | I60M5×17<br>(6,7 Nm) |
|                   | Vite (sottoplacchetta) |                         |                       | SM4×8C                 |                      | SM5×8,5C             |
|                   | Sottoplacchetta        |                         |                       | MT16-__M               |                      | MT16-__M             |
|                   | Chiave (vite)          | WT07IP                  | WT15IP                | WT15IP                 | WT20IP               | WT20IP               |

Inserto



Media Lavor.

A467

Codice sistema > A492

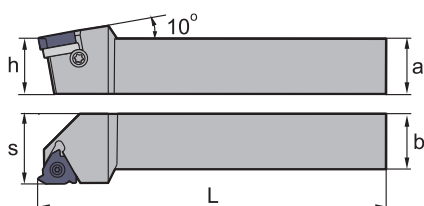
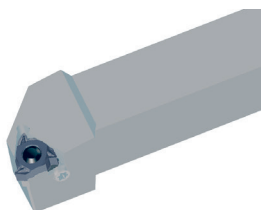
Scelta gradi > A465

Informazioni tecniche > A501

Dati di taglio > A500

## Portautensile per filettatura (esterna)

### SWR-B Thin Type



| Articolo    | * | Stock | Dimensioni [mm] |    |     |    |    | Inserto                                                                             |
|-------------|---|-------|-----------------|----|-----|----|----|-------------------------------------------------------------------------------------|
|             |   |       | a               | b  | L   | h  | s  |  |
| SWR1616H16B | ● |       | 16              | 16 | 100 | 16 | 20 | RT16.01W-****B                                                                      |
| SWR2020K16B | ● |       | 20              | 20 | 125 | 20 | 25 | RT16.01W-****B                                                                      |
| SWR2525M16B | ● |       | 25              | 25 | 150 | 25 | 32 | RT16.01W-****B                                                                      |
| SWR3225P16B | ● |       | 32              | 25 | 170 | 32 | 32 | RT16.01W-****B                                                                      |
| SWR3232P16B | ● |       | 32              | 32 | 170 | 32 | 40 | RT16.01W-****B                                                                      |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio                                                                   |                        |                          |
|-------------------------------------------------------------------------------------|------------------------|--------------------------|
|                                                                                     | Inserto                | RT16.01W-****B           |
|                                                                                     | h                      | 16-32                    |
|  | Vite                   | I60M3,5×12TT<br>(2,7 Nm) |
|  | Vite (sottoplacchetta) | SM4×8C                   |
|  | Sottoplacchetta        | MT16-__M                 |
|  | Chiave (vite)          | WT15IP                   |

| Inserto                                                                             |
|-------------------------------------------------------------------------------------|
|  |
| Media Lavor.                                                                        |
| A486                                                                                |

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Codice sistema &gt; A492

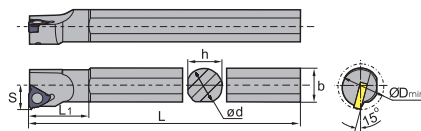
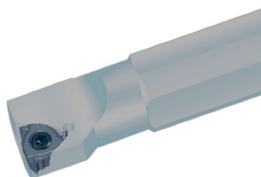
Scelta gradi &gt; A465

Informazioni tecniche &gt; A501

Dati di taglio &gt; A500

## Portautensile per filettatura (interna)

### SNR-B Thin Type



| Articolo    | * | Stock | Dimensioni [mm] |      |     |    |    |                |                  | Inserto        |
|-------------|---|-------|-----------------|------|-----|----|----|----------------|------------------|----------------|
|             |   |       | ød              | b    | L   | h  | s  | L <sub>1</sub> | D <sub>min</sub> |                |
| SNR0016M16B | ● |       | 16              | 15,5 | 150 | 15 | 12 | 27             | 20               | RT16.01N-****B |
| SNR0020Q16B | ● |       | 20              | 19   | 180 | 18 | 14 | 34             | 25               | RT16.01N-****B |
| SNR0025M16B | ● |       | 25              | 24   | 150 | 23 | 17 | 28,8           | 32               | RT16.01N-****B |
| SNR0032R16B | ● |       | 32              | 31   | 200 | 30 | 22 | 30,9           | 40               | RT16.01N-****B |
| SNR0032S16B | ● |       | 32              | 31   | 250 | 30 | 22 | 30,9           | 40               | RT16.01N-****B |

● In magazzino ○ Su richiesta

\* Con raffreddamento interno

| Parti di ricambio |                        |                          |                          |
|-------------------|------------------------|--------------------------|--------------------------|
|                   | Inserto                | RT16.01N-****B           | RT16.01N-****B           |
|                   | ød                     | 16                       | 20-32                    |
|                   | Vite                   | I60M3,5x08TT<br>(2,7 Nm) |                          |
|                   | Vite                   |                          | I60M3,5x12TT<br>(2,7 Nm) |
|                   | Vite (sottoplacchetta) |                          | SM4x8C                   |
|                   | Sottoplacchetta        |                          | MT16-__M                 |
|                   | Chiave (vite)          | WT15IP                   | WT15IP                   |

### Note

# A

## Tornitura

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## Indice

## Inseri per filettatura

| Gruppo materiali                             |                                                           | Composizione/Struttura/Trattamento termico    |                      | Durezza<br>HB Brinell | Gruppo di<br>sgrossatura | Velocità di taglio v <sub>c</sub> [m/min] |        |  |
|----------------------------------------------|-----------------------------------------------------------|-----------------------------------------------|----------------------|-----------------------|--------------------------|-------------------------------------------|--------|--|
|                                              |                                                           |                                               |                      |                       |                          | HC (PVD)                                  |        |  |
|                                              |                                                           |                                               |                      |                       |                          | YBG201                                    | YBG205 |  |
| P                                            | Acciaio non legato                                        | ca. 0,15 % C                                  | Temprato             | 125                   | 1                        | 190                                       | 190    |  |
|                                              |                                                           | ca. 0,45 % C                                  | Temprato             | 190                   | 2                        | 175                                       | 175    |  |
|                                              |                                                           | ca. 0,45 % C                                  | pre-temprato         | 250                   | 3                        | 145                                       | 145    |  |
|                                              |                                                           | ca. 0,75 % C                                  | Temprato             | 270                   | 4                        | 140                                       | 140    |  |
|                                              |                                                           | ca. 0,75 % C                                  | pre-temprato         | 300                   | 5                        | 135                                       | 135    |  |
|                                              | Acciaio al carbonio                                       |                                               | Temprato             | 180                   | 6                        | 170                                       | 170    |  |
|                                              |                                                           |                                               | pre-temprato         | 275                   | 7                        | 125                                       | 125    |  |
|                                              |                                                           |                                               | pre-temprato         | 300                   | 8                        | 115                                       | 115    |  |
|                                              |                                                           |                                               | pre-temprato         | 350                   | 9                        | 105                                       | 105    |  |
|                                              | Acciaio alto legato e<br>acciaio alto legato per utensili |                                               | Temprato             | 200                   | 10                       | 125                                       | 125    |  |
|                                              |                                                           |                                               | temprato e rinvenuto | 325                   | 11                       | 95                                        | 95     |  |
| M                                            | Acciaio inossidabile                                      | ferritico/martensitico                        | Temprato             | 200                   | 12                       | 165                                       | 165    |  |
|                                              |                                                           | martensitico                                  | pre-temprato         | 240                   | 13                       | 135                                       | 135    |  |
|                                              |                                                           | austenitico                                   | quencing             | 180                   | 14                       | 155                                       | 155    |  |
|                                              |                                                           | austenitico-ferritico                         |                      | 230                   | 15                       | 135                                       | 135    |  |
| K                                            | Ghisa grigia                                              | perlitico/ferritico                           |                      | 180                   | 16                       | 240                                       | 240    |  |
|                                              |                                                           | perlitico (martensitico)                      |                      | 260                   | 17                       | 185                                       | 185    |  |
|                                              | Ghisa sferoidale                                          | ferritico                                     |                      | 160                   | 18                       | 220                                       | 220    |  |
|                                              |                                                           | perlitico                                     |                      | 250                   | 19                       | 165                                       | 165    |  |
|                                              | Ghisa malleabile                                          | ferritico                                     |                      | 130                   | 20                       | 175                                       | 175    |  |
|                                              |                                                           | perlitico                                     |                      | 230                   | 21                       | 165                                       | 165    |  |
| N                                            | Lavorazioni plastiche di leghe<br>di alluminio            | non invecchiabile                             |                      | 60                    | 22                       | 800                                       | 800    |  |
|                                              |                                                           | invecchiabile                                 | indurito             | 100                   | 23                       | 600                                       | 600    |  |
|                                              | Leghe di alluminio fuso                                   | ≤ 12 % Si, non invecchiabile                  |                      | 75                    | 24                       | 320                                       | 320    |  |
|                                              |                                                           | ≤ 12 % Si, invecchiabile                      | indurito             | 90                    | 25                       | 240                                       | 240    |  |
|                                              |                                                           | > 12 % Si, non invecchiabile                  |                      | 130                   | 26                       | 160                                       | 160    |  |
|                                              | Rame e leghe di rame<br>(bronzo/ottone)                   | Leghe per macchine di tipo multiplo, PB > 1 % |                      | 110                   | 27                       | 160                                       | 160    |  |
|                                              |                                                           | CuZn, CuSnZn                                  |                      | 90                    | 28                       | 600                                       | 600    |  |
| CuSn, rame senza piombo e rame elettrolitico |                                                           | 100                                           | 29                   | 200                   | 200                      |                                           |        |  |
| S                                            | Leghe resistenti al calore                                | Base Fe                                       | Temprato             | 200                   | 30                       | 95                                        | 95     |  |
|                                              |                                                           |                                               | indurito             | 280                   | 31                       | 50                                        | 50     |  |
|                                              |                                                           | Base Ni o Co                                  | Temprato             | 250                   | 32                       | 80                                        | 80     |  |
|                                              |                                                           |                                               | indurito             | 350                   | 33                       | 70                                        | 70     |  |
|                                              |                                                           |                                               | fuso                 | 320                   | 34                       | 70                                        | 70     |  |
|                                              | Leghe di titanio                                          | Titanio puro                                  |                      | R <sub>m</sub> 400    | 35                       | 145                                       | 145    |  |
|                                              |                                                           | Leghe Alpha + Beta                            | indurito             | R <sub>m</sub> 1050   | 36                       | 50                                        | 50     |  |
| H                                            | Acciaio temprato                                          |                                               | temprato e rinvenuto | 55 HRC                | 37                       |                                           |        |  |
|                                              |                                                           |                                               | temprato e rinvenuto | 60 HRC                | 38                       |                                           |        |  |
|                                              | Ghisa dura                                                |                                               | fuso                 | 400                   | 39                       |                                           |        |  |
|                                              | Ghise temprate                                            |                                               | temprato e rinvenuto | 55 HRC                | 40                       |                                           |        |  |
| X                                            | Materiali non metallici                                   | Termoplastiche                                |                      |                       | 41                       |                                           |        |  |
|                                              |                                                           | Termoindurenti                                |                      |                       | 42                       |                                           |        |  |
|                                              |                                                           | Vetroresina VTR                               |                      |                       | 43                       |                                           |        |  |
|                                              |                                                           | Plastica rinforzata in fibra di carbonio      |                      |                       | 44                       |                                           |        |  |
|                                              |                                                           | Grafite                                       |                      |                       | 45                       |                                           |        |  |
|                                              |                                                           | Legno                                         |                      |                       | 46                       |                                           |        |  |

Note: I dati di taglio dati sono valori guida, che sono stati determinati in condizioni ideali.

A seconda dell'applicazione, devono essere adattati individualmente.

Esempi di materiali per gruppi di taglio sono disponibili a pagina D11.

HC metallo duro rivestito



## Informazioni tecniche

|                                                    |           |
|----------------------------------------------------|-----------|
| Misure per la risoluzione dei problemi – Tornitura | A502-A504 |
| Informazioni tecniche – Tornitura                  | A505-A512 |
| Gli utensili speciali – tornitura                  | A513      |

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Tornitura

**B**

Fresatura

**C**

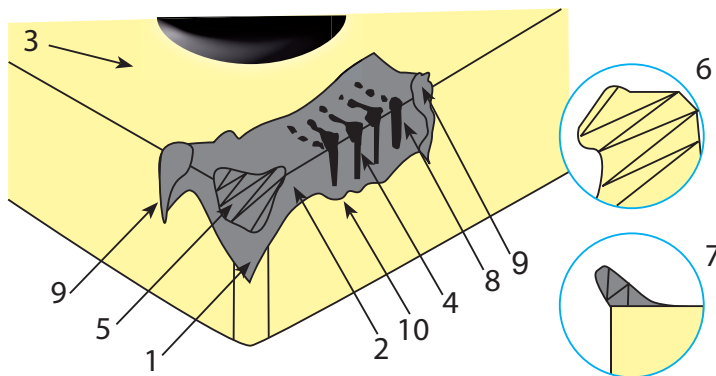
Foratura

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tecniche**E**

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## Misure per la risoluzione dei problemi – generali tornitura

| vedi fig. | Tipo di usura              | Effetti                                                                                                                                             | Causa                                                                                                                                                                                                                                                   | Contromisura                                                                                                                                                                                                                                                    |
|-----------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1+2       | Usura sul fianco           | <ul style="list-style-type: none"> <li>– Scarsa qualità superficiale e dimensioni inconsistenti</li> <li>– Aumento della forza di taglio</li> </ul> | <ul style="list-style-type: none"> <li>– Grado con resistenza all'usura insufficiente</li> <li>– Velocità di taglio troppo elevata</li> <li>– Angolo di spoglia inferiore troppo piccolo</li> <li>– Velocità di avanzamento troppo bassa</li> </ul>     | <ul style="list-style-type: none"> <li>– Grado con maggiore resistenza all'usura</li> <li>– Ridurre la velocità di taglio</li> <li>– Aumentare l'angolo di spoglia</li> <li>– Ridurre la velocità di avanzamento</li> </ul>                                     |
| 3         | Craterizzazione            | <ul style="list-style-type: none"> <li>– Qualità superficiale e controllo del truciolo scarsi</li> </ul>                                            | <ul style="list-style-type: none"> <li>– Grado con resistenza all'usura insufficiente</li> <li>– Velocità di taglio troppo elevata</li> <li>– Velocità di avanzamento troppo alta</li> </ul>                                                            | <ul style="list-style-type: none"> <li>– Grado con maggiore resistenza all'usura</li> <li>– Ridurre la velocità di taglio</li> <li>– Ridurre la velocità di avanzamento</li> </ul>                                                                              |
| 4         | Scheggiatura               | <ul style="list-style-type: none"> <li>– Durata utensile non stabile</li> <li>– Rottura improvvisa del tagliente</li> </ul>                         | <ul style="list-style-type: none"> <li>– Grado troppo duro</li> <li>– Velocità di avanzamento troppo alta</li> <li>– Stabilità tagliente Stabilità del portautensile o bloccaggio insufficienti</li> </ul>                                              | <ul style="list-style-type: none"> <li>– Grado con maggiore tenacità</li> <li>– Ridurre la velocità di avanzamento</li> <li>– Cambiare l'arrotondamento del tagliente</li> <li>– Utilizzare un portautensile con maggiore stabilità</li> </ul>                  |
| 5         | Rottura                    | <ul style="list-style-type: none"> <li>– Aumento della forza di taglio</li> <li>– Scarsa qualità superficiale e dimensioni inconsistenti</li> </ul> | <ul style="list-style-type: none"> <li>– Grado troppo duro</li> <li>– Velocità di avanzamento troppo alta</li> <li>– Stabilità del tagliente insufficiente</li> <li>– Stabilità del portautensile o bloccaggio insufficienti</li> </ul>                 | <ul style="list-style-type: none"> <li>– Grado con maggiore tenacità</li> <li>– Ridurre la velocità di avanzamento</li> <li>– Cambiare l'arrotondamento del tagliente</li> <li>– Utilizzare un portautensile con maggiore stabilità</li> </ul>                  |
| 6         | Deformazione plastica      | <ul style="list-style-type: none"> <li>– Dimensioni inconsistenti</li> <li>– Danneggiamento del tagliente</li> </ul>                                | <ul style="list-style-type: none"> <li>– Grado con resistenza all'usura insufficiente</li> <li>– Velocità di taglio troppo elevata</li> <li>– Profondità e/o velocità di taglio troppo alta</li> <li>– Temperatura sul tagliente troppo alta</li> </ul> | <ul style="list-style-type: none"> <li>– Grado con maggiore resistenza all'usura</li> <li>– Ridurre la velocità di taglio</li> <li>– Ridurre la profondità di taglio e la velocità di avanzamento</li> <li>– Grado con maggiore resistenza al calore</li> </ul> |
| 7         | Tagliente di riporto       | <ul style="list-style-type: none"> <li>– Aumento della forza di taglio</li> <li>– Pessima finitura superficiale</li> </ul>                          | <ul style="list-style-type: none"> <li>– Velocità di taglio troppo bassa</li> <li>– Tagliente non sufficientemente affilato</li> <li>– Grado non adatto</li> </ul>                                                                                      | <ul style="list-style-type: none"> <li>– Aumentare la velocità di taglio</li> <li>– Aumentare l'angolo di spoglia</li> <li>– Selezionare un grado adatto</li> </ul>                                                                                             |
| 8         | Termica usura              | <ul style="list-style-type: none"> <li>– Rottura per interazione termica, soprattutto in caso di taglio interrotto (fresatura)</li> </ul>           | <ul style="list-style-type: none"> <li>– Variazioni di temperatura della lavorazione</li> <li>– Grado troppo duro</li> </ul>                                                                                                                            | <ul style="list-style-type: none"> <li>– Taglio a secco</li> <li>– Grado con maggiore tenacità</li> </ul>                                                                                                                                                       |
| 9         | Intagliatura               | <ul style="list-style-type: none"> <li>– Bave</li> <li>– Aumento della forza di taglio</li> </ul>                                                   | <ul style="list-style-type: none"> <li>– Danneggiamento dovuto ai trucioli (rompitrucciolo sfilacciato)</li> <li>– Avanzamento e velocità di taglio troppo alte</li> </ul>                                                                              | <ul style="list-style-type: none"> <li>– Grado con maggiore resistenza all'usura</li> <li>– Aumentare l'angolo di spoglia per ottenere un tagliente più affilato</li> <li>– Ridurre la velocità di taglio</li> </ul>                                            |
| 10        | Sfaldamento (rivestimento) | <ul style="list-style-type: none"> <li>– Soprattutto durante la lavorazione di materiali più duri o quando si verificano vibrazioni</li> </ul>      | <ul style="list-style-type: none"> <li>– Adesioni sul tagliente e scheggiature</li> <li>– Scarso deflusso del truciolo</li> </ul>                                                                                                                       | <ul style="list-style-type: none"> <li>– Aumentare l'angolo di spoglia per ottenere un tagliente più affilato</li> <li>– Rompitrucciolo con gola più grande</li> </ul>                                                                                          |



## Misure per la risoluzione dei problemi – PCBN&amp; PCD

| Tipo di usura                                    | Contromisura                                                                                                                                                                          |                                                                                                                                                                                                                       |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                  | Geometria                                                                                                                                                                             | Condizioni di taglio                                                                                                                                                                                                  |
| Usura sul fianco                                 | <ul style="list-style-type: none"> <li>– Tagliente più affilato per una forza di taglio minore</li> <li>– Fase negativa più piccola</li> <li>– Utilizzare inserti positivi</li> </ul> | <ul style="list-style-type: none"> <li>– Ridurre la velocità di taglio</li> <li>– Aumentare la velocità di avanzamento per ridurre la durata del taglio</li> </ul>                                                    |
| Intagliatura                                     | <ul style="list-style-type: none"> <li>– Raggio maggiore</li> </ul>                                                                                                                   | <ul style="list-style-type: none"> <li>– Utilizzare il metodo della velocità di avanzamento variabile</li> </ul>                                                                                                      |
| Craterizzazione/Rottura dovuta a craterizzazione | <ul style="list-style-type: none"> <li>– Tagliente più affilato per una forza di taglio minore</li> </ul>                                                                             | <ul style="list-style-type: none"> <li>– Ridurre la velocità di taglio</li> <li>– Aumentare la velocità di avanzamento per ridurre la durata del contatto ed aumentare la distanza tra tagliente e cratere</li> </ul> |
| Scheggiature dovute a impatti o vibrazioni       | <ul style="list-style-type: none"> <li>– Angolo di fase negativa maggiore/o onatura</li> </ul>                                                                                        | <ul style="list-style-type: none"> <li>– Aumentare la velocità di avanzamento per diminuire il numero degli impatti</li> </ul>                                                                                        |
| Sfaldamento                                      | <ul style="list-style-type: none"> <li>– Tagliente più affilato per una forza di taglio minore</li> <li>– Fase negativa più piccola</li> <li>– Utilizzare inserti positivi</li> </ul> | <ul style="list-style-type: none"> <li>– Aumentare la velocità di avanzamento per ridurre la durata del taglio</li> </ul>                                                                                             |
| Incrinatura/Rottura                              | <ul style="list-style-type: none"> <li>– Tagliente più affilato per una forza di taglio minore</li> <li>– Fase negativa più piccola</li> <li>– Utilizzare inserti positivi</li> </ul> | <ul style="list-style-type: none"> <li>– Diminuire velocità di taglio, velocità di avanzamento e profondità di taglio</li> <li>– Taglio a secco</li> </ul>                                                            |
| Scheggiature                                     | <ul style="list-style-type: none"> <li>– Fase negativa maggiore</li> </ul>                                                                                                            | <ul style="list-style-type: none"> <li>– Aumentare la velocità di taglio per ridurre la forza di taglio</li> </ul>                                                                                                    |

Per un'analisi dettagliata, vi preghiamo di inviarci gli inserti usati. Se il problema è la rottura, si prega di utilizzare inserti solo per l'80-90 % della durata dell'utensile prevista, poiché gli inserti rotti non contengono più alcuna informazione.

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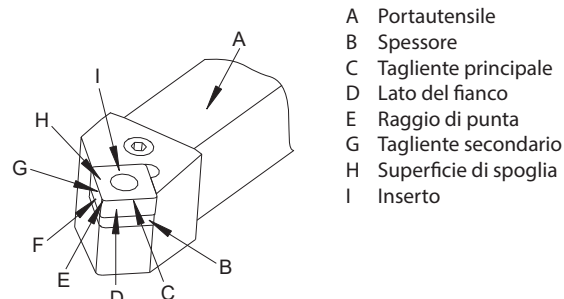
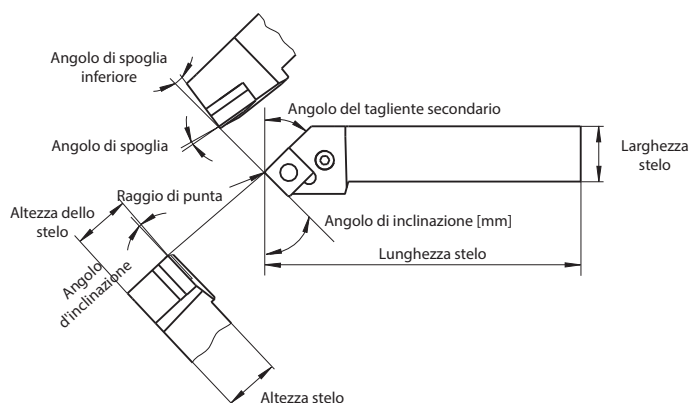
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## Misure per la risoluzione dei problemi – filettatura

| Problema                                             | Causa                                                                              | Soluzione                                                                                                              |
|------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Ampia usura sul fianco                               | – Velocità di taglio troppo elevata                                                | – Ridurre la velocità di taglio                                                                                        |
|                                                      | – Incremento troppo basso                                                          | – Diminuire il numero degli incrementi                                                                                 |
|                                                      | – Inserto sopra/sotto centro di rotazione                                          | – Correggere l'altezza dell'inserto                                                                                    |
| Segni di usura sul lato destro e sinistro differenti | – Incremento laterale non ottimale                                                 | – Correggere il metodo d'incremento laterale                                                                           |
|                                                      | – L'angolo d'inclinazione e quello principale non corrispondono                    | – Cambiare lo spessore per ottenere un angolo corretto                                                                 |
| Rottura                                              | – Velocità di taglio troppo bassa                                                  | – Aumentare la velocità di taglio                                                                                      |
|                                                      | – Forza di taglio troppo elevata                                                   | – Aumentare il numero degli incrementi<br>– Diminuire la dimensione dell'incremento                                    |
|                                                      | – Condizioni instabili                                                             | – Migliorare il bloccaggio del pezzo e la sporgenza, per evitare vibrazioni                                            |
|                                                      | – Scarso controllo del truciolo                                                    | – Aumentare la pressione del refrigerante per migliorare l'asportazione del truciolo                                   |
| Deformazione plastica                                | – Velocità di taglio e temperatura troppo elevate                                  | – Ridurre la velocità di taglio<br>– Aumentare il numero degli incrementi<br>– Diminuire la profondità dell'incremento |
|                                                      | – Scarca alimentazione di refrigerante                                             | – Migliorare l'alimentazione del refrigerante                                                                          |
| Qualità superficiale della filettatura insufficiente | – Velocità di taglio troppo bassa                                                  | – Aumentare la velocità di taglio                                                                                      |
|                                                      | – L'inserto si trova oltre il centro                                               | – Correggere l'altezza dell'inserto                                                                                    |
|                                                      | – Scarso controllo del truciolo                                                    | – Cambiare velocità di avanzamento e/o incremento                                                                      |
| Profilo della filettatura errato                     | – Altezza dell'inserto errata                                                      | – Modificare l'altezza dell'inserto                                                                                    |
|                                                      | – Il portautensile non si trova ad un angolo di 90°                                | – Allineare di nuovo il portautensile                                                                                  |
|                                                      | – Passo errato nella macchina                                                      | – Allineare di nuovo la macchina                                                                                       |
| Profilo del filetto non sufficientemente profondo    | – Altezza dell'inserto errata                                                      | – Modificare l'altezza dell'inserto                                                                                    |
|                                                      | – Rottura del tagliente                                                            | – Sostituzione dell'inserto                                                                                            |
|                                                      | – Usura troppo elevata                                                             | – Sostituzione dell'inserto                                                                                            |
| Formazione tagliente di riporto                      | – Temperatura sul tagliente troppo bassa                                           | – Aumentare la velocità di taglio                                                                                      |
|                                                      | – Soprattutto durante la lavorazione di acciaio al carbonio o acciaio inossidabile | – Utilizzare un grado con sufficiente tenacità (rivestito PVD)                                                         |
| Vibrazioni                                           | – Parametri di taglio errati                                                       | – Aumentare o ridurre fortemente la velocità di taglio                                                                 |
|                                                      | – Altezza dell'inserto errata                                                      | – Modificare l'altezza dell'inserto                                                                                    |
|                                                      | – Bloccaggio del pezzo insufficiente                                               | – Migliorare il sistema di bloccaggio e minimizzare la sporgenza dell'utensile                                         |

## Tornitura generale

### Geometria del tagliente



### Angolo di spoglia

Un aumento dell'angolo di spoglia riduce le forze di taglio, in quanto il truciolo viene leggermente deviato dalla sua direzione di flusso. Questo sistema di taglio è nel complesso più affilato e produce così un carico inferiore del bordo, minori sollecitazioni termiche. In generale l'usura del fianco è inferiore e quindi la prestazione di taglio superiore. Questo significa anche un indebolimento del cuneo di taglio, un aumento del carico sul tagliente e quindi un incremento del rischio di scheggiatura del tagliente.

| Angolo di spoglia | Applicazioni                                                             |
|-------------------|--------------------------------------------------------------------------|
| Piccolo           | Lavorazione di materiali duri e fragili, sgrossatura, taglio interrotto  |
| Dimensione        | Lavorazione di materiali morbidi e resistenti, lavorazione di precisione |

### Angolo di spoglia inferiore

Un aumento dell'angolo di spoglia inferiore produce una riduzione dell'attrito tra pezzo ed utensile. Le forze di taglio sono complessivamente inferiori ed è possibile ottenere finiture superficiali migliori. Tuttavia, un angolo di spoglia inferiore troppo grande indebolisce la stabilità del tagliente. A seconda dell'applicazione, l'angolo di spoglia inferiore è compreso tra 3° e 12°.

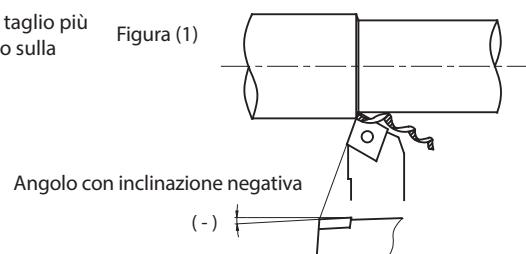
| Spoglia superiore | Applicazioni                                                                                                                               |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Piccolo           | Lavorazione di materiali duri e fragili, sgrossatura con tagliente stabile                                                                 |
| Dimensione        | Lavorazione di materiali che tendono a rapidamente a cambiamenti nella microstruttura, lavorazioni di precisione con basse forze di taglio |

### Angolo d'inclinazione

Un angolo d'inclinazione positivo o negativo del tagliente ha una notevole influenza sulla direzione del flusso dei trucioli e sulla stabilità del tagliente e del punto di taglio. Questo viene incrementato per un angolo negativo e protegge in questo modo l'utensile dallo stress da impatto es. nella sgrossatura o nella lavorazione a taglio interrotto. In questo modo viene però aumentata anche la forza di reazione, che può causare vibrazioni. Un angolo positivo del tagliente è vantaggioso nella finitura, in quanto i trucioli vengono portati via dalla superficie già lavorata.

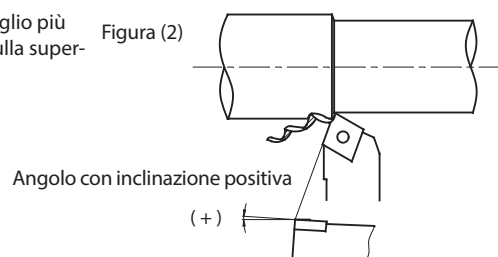
Come illustrato nella figura (1), un angolo negativo del tagliente, grazie al punto di taglio più basso rispetto alla superficie del portautensili, provoca uno scorrimento del truciolo sulla superficie già lavorata del pezzo.

Figura (1)



Come illustrato nella figura (2), un angolo positivo del tagliente, grazie al punto di taglio più alto rispetto alla superficie del portautensili, provoca uno scorrimento del truciolo sulla superficie non lavorata del pezzo.

Figura (2)



A

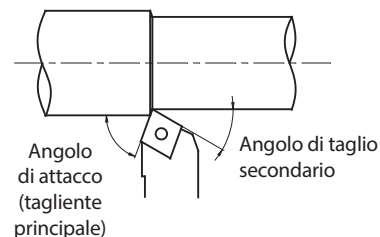
Tornitura

## Tornitura generale

### Angolo di attacco (tagliente principale)

Una riduzione dell'angolo di attacco aumenta la stabilità del tagliente. La percentuale del tagliente per la formazione del truciolo viene allargata, migliorano la distribuzione del carico per il tagliente e la dissipazione del calore. Un angolo piccolo di attacco ha un effetto positivo sulla durata. Un angolo grande di attacco di 90° viene usato nella lavorazione di alberi lunghi e sottili per evitare flessioni del pezzo.

| Inclinazione [mm] | Applicazioni                                                                              |
|-------------------|-------------------------------------------------------------------------------------------|
| Piccolo           | Per materiali con elevata resistenza alla trazione, elevata durezza e superficie indurita |
| Dimensione        | Per macchine con bassa stabilità                                                          |



B

Fresatura

### Angolo del tagliente secondario

La grandezza dell'angolo del tagliente secondario influisce sulla qualità della superficie del pezzo e sulla stabilità tagliente. Se l'angolo è troppo piccolo possono verificarsi vibrazioni.

Per la sgrossatura dovrebbe essere utilizzato un angolo piccolo, poiché il tagliente ha una maggiore stabilità. L'angolo più grande dovrebbe essere scelto per la lavorazione di precisione, al fine di ottenere finiture superficiali di elevata qualità.

### Raggio di punta

Il raggio di punta influenza la stabilità del tagliente e la finitura superficiale e i dati di taglio.

Con un grande raggio di punta migliora la superficie e aumenta la stabilità del tagliente. I lati del fianco e l'usura della superficie di spoglia si riducono. Un incremento del raggio aumenta anche la pressione di taglio. Se è troppo grande, possono verificarsi vibrazioni che hanno un effetto negativo sul controllo del truciolo.

| Raggio     | Applicazioni                                                                                                                            |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Piccolo    | Finitura con piccole profondità di taglio<br>Lavorazione di alberi lunghi e sottili<br>Bassa stabilità della macchina o bloccaggio      |
| Dimensione | Sgrossatura con elevata stabilità del tagliente<br>Lavorazioni a taglio interrotto o materiali duri<br>Elevata stabilità della macchina |

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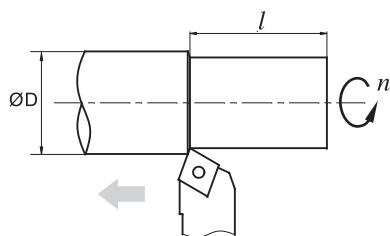
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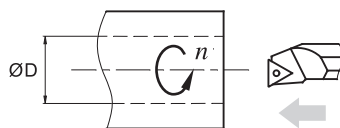
## Tornitura generale

Velocità di taglio  $V_c$ 

$$V_c = \frac{\pi \times D \times n}{1000} \text{ [m/min]}$$



Tornitura esterna



Tornitura interna

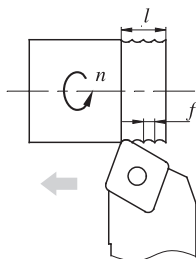
$V_c$ : Velocità di taglio [m/min]  
 $n$ : Numero di giri [1/min]  
 $f$ : Avanzamento per rotazione [mm]

Esempio:  $n = 250$  1/min,  $f = 0,2$  mm,  
 $l = 150$  mm

Risultato: [Inserisci valori nella formula  $V_c$ ]

Velocità di avanzamento  $F$ 

$$f = \frac{l}{n} \text{ [mm/rev]}$$



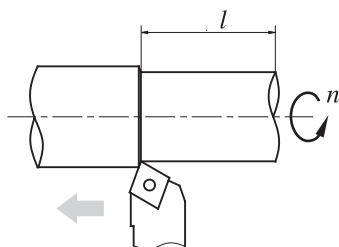
$f$ : Avanzamento per rotazione [mm]  
 $l$ : Lunghezza del taglio per minuto [mm]  
 $n$ : Numero di giri [1/min]

Esempio:  $n = 500$  1/min,  $l = 100$  mm/min  
 Risultato: [Inserisci valori nella formula  $f$ ]

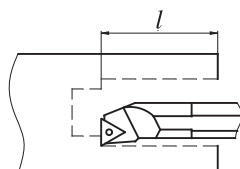
$$f = \frac{l}{n} = \frac{100}{500} = 0,2 \text{ mm}$$

## Durata di taglio

$$T_c = \frac{l}{f \times n} \text{ [min]}$$



Tornitura esterna



Tornitura interna

$T_c$ : Durata di taglio [min]  
 $l$ : Lunghezza del taglio per minuto [mm]  
 $f$ : Avanzamento per rotazione [mm]  
 $n$ : Numero di giri [1/min]

Esempio:  $n = 250$  1/min,  $f = 0,2$  mm,  
 $l = 150$  mm

Risultato: [Inserisci i valori nella formula  $T_c$ ]

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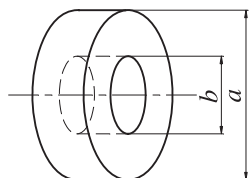
A

Tornitura

## Tornitura generale

Durata di taglio per la spianatura

$$T_C = \frac{\pi \times (a^2 - b^2)}{4000 \times V_C \times f} \text{ [min]}$$



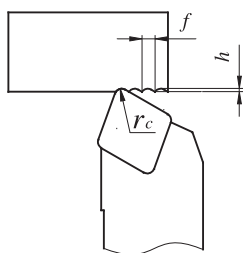
$T_C$ : Durata di taglio [min]  
 $V_C$ : Velocità di taglio [m/min]  
 $f$ : Avanzamento per rotazione [mm]

B

Fresatura

Rugosità superficiale teorica R

$$R = \frac{f^2}{8r_c} \times 1000 \text{ [}\mu\text{m]}$$



$R$ : Rugosità superficiale [ $\mu\text{m}$ ]  
 $f$ : Avanzamento per rotazione [mm]  
 $r_c$ : Raggio dell'inserto [mm]

Esempio:  $f = 0,2 \text{ mm}$ ,  $r_c = 0,4 \text{ mm}$

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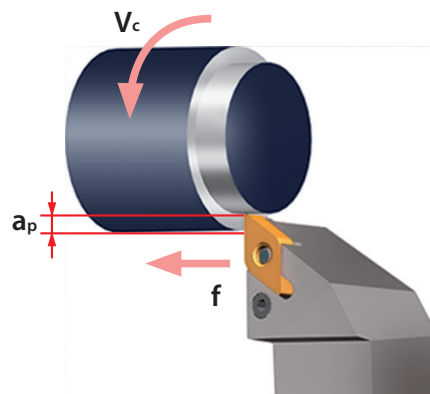


## Tornitura generale

### Effetto dei tre parametri di taglio sulla tornitura

I requisiti attuali per gli strumenti di taglio moderni sono in prima istanza: cicli di lavorazione brevi, lunga durata dell'utensile ed elevata precisione di lavorazione.

In funzione della potenza della macchina, del materiale, della forma e della durezza del pezzo, la scelta degli strumenti e soprattutto dei parametri di taglio corretti sono il prerequisito per una lavorazione economica. Ciò che chiamiamo "Effetto dei tre parametri di taglio nella tornitura".



#### 1. Velocità di taglio [ $V_c$ ]

Un aumento dell'angolo di spoglia riduce le forze di taglio, in quanto il truciolo viene leggermente deviato dalla sua direzione di flusso. Questo sistema di taglio è nel complesso più affilato e produce così un carico inferiore del bordo, minori sollecitazioni termiche. In generale l'usura del fianco è inferiore e quindi la prestazione di taglio superiore. Questo significa anche un indebolimento del cuneo di taglio, un aumento del carico sul tagliente e quindi un incremento del rischio di scheggiatura del tagliente.

**Effetto della velocità di taglio:** La velocità di taglio è uno dei parametri più importanti nella lavorazione, poiché influenza in maniera decisiva il tempo di produzione. La scelta della velocità di taglio dipende principalmente dalla composizione e resistenza del materiale da lavorare, dalla tenacità e durezza del materiale di taglio utilizzato come anche dalla precisione dimensionale e dalla finitura superficiale desiderata. Influenza significativamente l'usura e la vita dell'utensile, a causa dell'aumento parabolico della temperatura del tagliente con la velocità di taglio. La velocità di taglio deve quindi essere scelta in modo da ottenere un rapporto tra il tempo di produzione e durata del taglio e il tempo necessario per la rimessa in servizio (sostituzione dell'inserto) dell'utensile e della macchina.

Un aumento della velocità di taglio del 20% dimezza la durata dell'utensile. Un aumento del 50% della velocità di taglio riduce la durata a circa 1/5 della durata dell'utensile originale. Un avanzamento minore causa vibrazioni e riduce la vita dell'utensile.

#### 2. Avanzamento [ $f$ ]

Nella tornitura l'avanzamento rappresenta la distanza percorsa dal portautensile per ogni giro del pezzo. L'unità di misura dell'avanzamento è millimetri per giro [mm/giro].

**Effetto dell'avanzamento:** Una riduzione dell'avanzamento incrementa allo stesso tempo l'usura del fianco e riduce la vita utile dell'utensile. Un aumento dell'avanzamento aumenta da un lato l'economicità della lavorazione, ma dall'altro lato anche la temperatura di taglio e l'usura.

#### 3. Profondità di taglio [ $a_p$ ]

La profondità di taglio è la metà della differenza tra il diametro del pezzo grezzo e il diametro del pezzo finito. L'unità di misura della profondità di taglio è il millimetro [mm].

**Effetto della profondità di taglio:** La modifica della profondità di taglio non un grande effetto sulla durata dell'utensile. Quando si lavorano materiali con una superficie dura, una profondità di taglio troppo bassa comporta una minore durata dell'utensile. Quando si lavora su superfici non lavorate o materiali colati, è necessario selezionare la profondità massima di taglio in base alle prestazioni della macchina in modo che il tagliente e il raggio dell'angolo siano più profondi rispetto allo strato rigido. Questo aiuta a prevenire un'usura eccessiva.

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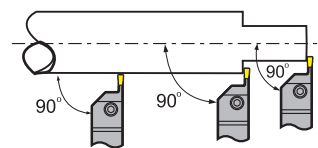
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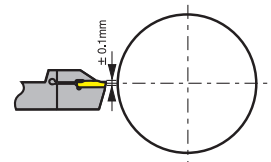
## Scanalature e gole

### Impostazione dell'altezza del tagliente per scanalature e gole

- Il portautensile in maniera tale che si trovi a 90° rispetto all'asse centrale del pezzo. In questo modo si ottiene una migliore qualità della superficie e si riduce il rischio di oscillazioni.



- Si prega di montare il portautensile in modo tale che durante la realizzazione di scanalature e gole l'area di tolleranza sia nell'intervallo di  $\pm 0,1$  mm rispetto all'asse centrale, in particolare per pezzi con diametri piccoli. In questo modo si ottiene una maggiore durata, si riducono le forze di taglio e la formazione di bave.

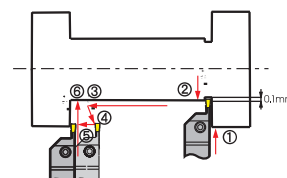


### Troncatura

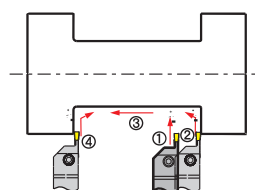
- Una riduzione della velocità di avanzamento del 30 % in avvicinamento alla lama all'asse centrale del pezzo prolunga la durata dell'inserto.
- Selezionare il portautensile con la sporgenza più piccola possibile per evitare vibrazioni e la deformazione dell'utensile.

### Tornitura longitudinale e contornatura

- Sequenza di lavorazione 0,5 mm:
  - Avanzamento radiale alla profondità richiesta di taglio (circa max.  $0,75 \times$  larghezza inserto)
  - Tornare indietro radialmente di 0,1 mm
  - Tornitura longitudinale sulla spalla opposta
  - Tornare indietro diagonalmente di 0,5 mm verso l'esterno fino al punto di partenza
  - Avanzamento radiale alla profondità richiesta di taglio.

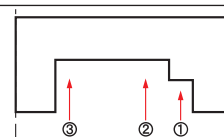


- Durante la tornitura del fondo della scanalatura o dello smusso, seguire i passaggi adiacenti. Questo riduce la flessione dell'utensile ed impedisce la scheggiatura del tagliente.

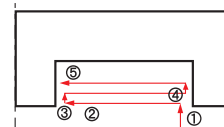


### Scanalatura assiale

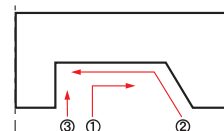
- Sgrossatura:  
Lavorazione dal diametro più grande verso l'asse. Durante il ritorno dell'utensile si raccomanda di piegarlo leggermente.



- Scanalature interne:  
Profondità di taglio per avanzamento assiale inferiore a  $0,75 \times S$  (larghezza dell'inserto). Quando la larghezza della camera è maggiore della profondità, seguire i passaggi indicati. Quando la profondità della camera è maggiore della larghezza, si consiglia in ogni passaggio l'asportazione del diametro richiesto.

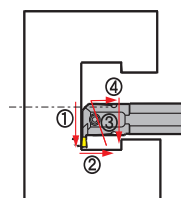


- Finitura:  
Per la finitura, realizzare prima il diametro esterno e il fondo. Infine realizzare il diametro interno fino alla dimensione richiesta.



### Lavorazione interna

- Sequenza di lavorazione come da figura. Per la lavorazione di fori ciechi, è consigliato lavorare dall'interno verso l'esterno per una migliore rimozione del truciolo.



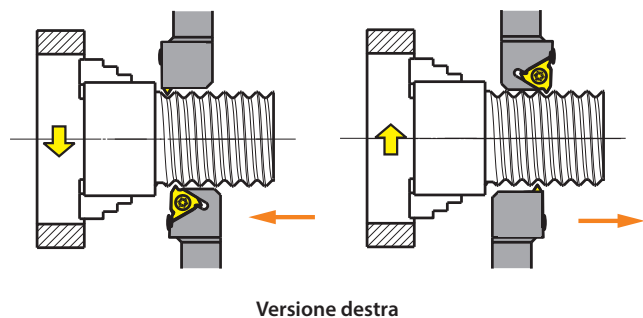
## Filettatura

### Sequenza di lavorazione per i migliori risultati di filettatura

1. Selezione del metodo di filettatura
2. Scelta dell'angolo e dello spessore
3. Scelta del portautensile e degli inserti
4. Scelta dei parametri di taglio
5. Scelta della direzione di taglio

### Metodo di filettatura

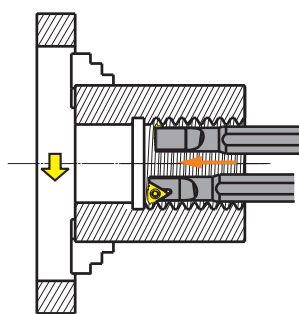
#### Lavorazione esterna



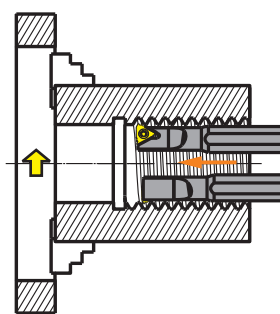
Versione destra

Versione sinistra

#### Lavorazione interna



Versione destra



Versione sinistra

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni  
tecniche

E

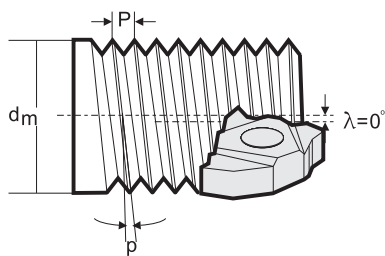
Indice

## Scelta dell'angolo e dello spessore

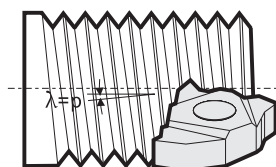
### Selezione dell'inclinazione

Gli angoli di spoglia del fianco del profilo della filettatura dipendono dall'angolo di passo della filettatura. L'angolo di passo della filettatura deve essere per quanto possibile coincidere con l'angolo di inclinazione dell'inserto, al fine di ottenere un profilo accurato, per evitare l'usura irregolare sul fianco dell'inserto e per garantire una maggiore durata.

$$\lambda = \arctan \frac{p}{d_2 \times \pi}$$



Angolo di passo (p)

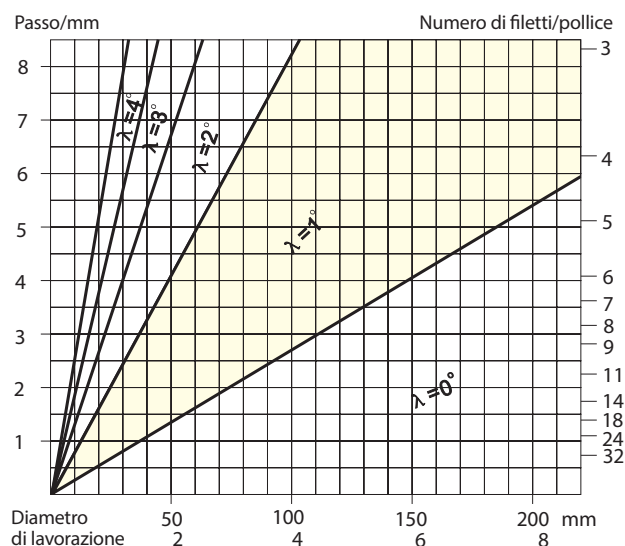


Angolo d'inclinazione (λ)

p Passo  
d<sub>2</sub> Diametro del fianco  
λ Angolo d'inclinazione

### Selezione dello spessore corretto

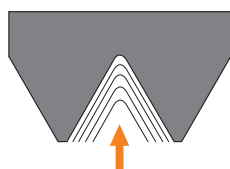
| Passo   | Dimensioni | Inclinazione | Sottopiacchetta |
|---------|------------|--------------|-----------------|
| 0,5–0,3 | 16         | 0            | MT16-00M        |
|         |            | 1            | MT16-01M        |
|         |            | 2            | MT16-02M        |
|         |            | 3            | MT16-03M        |
|         |            |              |                 |
| 3,5–6,0 | 22         | 0            | MT22-00M        |
|         |            | 1            | MT22-01M        |
|         |            | 2            | MT22-02M        |
|         |            | 3            | MT22-03M        |
|         |            |              |                 |



Lo spessore per  $\lambda = 1^\circ$  viene consegnato insieme al portautensili.

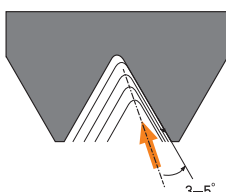
### Modalità d'incremento nella filettatura

Il numero di passaggi e di incremento sono i punti chiave della filettatura. I dati consigliati sono da considerarsi come valori di partenza. Nel caso di una maggiore usura, consultare pagina A447 (risoluzione dei problemi).



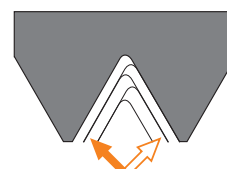
Incremento radiale

L'incremento radiale richiede una profondità di taglio bassa, un tagliente affilato e un grado duro.



Incremento sul fianco modificato

Incremento al di sotto di un angolo di 3-5° rispetto al fianco della filettatura. Adatto per materiali a truciolo lungo e filettatura interna. Buona asportazione del truciolo.

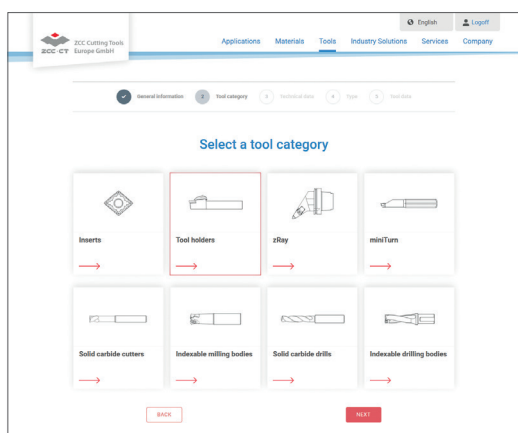


Incremento alternato

Incremento alternato lungo entrambi i fianchi. Applicazione per ampi passi e materiali a truciolo lungo. Usura uniforme del fianco su entrambi i bordi di taglio.

# Andate direttamente all'utensile speciale personalizzato per operazioni di tornitura

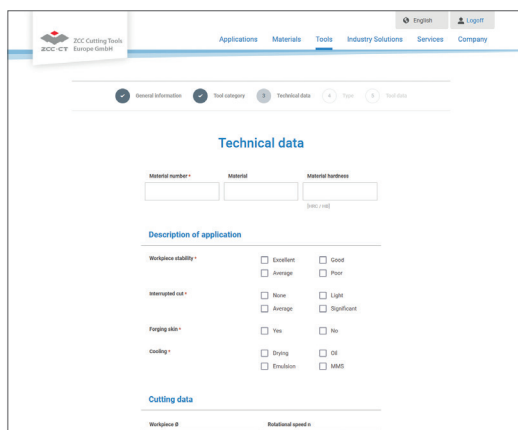
Lavorate con cicli di tornitura per cui è possibile ottenere vantaggi in termini commerciali, tecnici, logistici o di processo impiegando utensili ottimizzati su misura e specifici per le vostre esigenze? ZCC Cutting Tools Europe vi offre consulenza e supporto personali nella programmazione, implementazione e ordinazione dei prodotti. Con il nostro innovativo Onlinetool dedicato alle richieste di utensili speciali, riceverete la vostra offerta personalizzata con pochi semplici passaggi (<https://www.zccct-europe.com/it/gli-utensili/gli-utensili-speciali>).



Home page "Strumento online per utensili speciali" con Selezione della categoria dell'utensile

## Selezione della categoria dell'utensile

Scansionando il codice QR presente nella pagina, sarete reindirizzati alla home page del nostro strumento online per la richiesta di utensili speciali e qui potrete iniziare subito con la categoria precedentemente selezionata. È semplicissimo.



Definizione dei parametri pertinenti dell'utensile

## Definizione dei parametri dell'utensile

Successivamente potrete seguire comodamente la procedura. Potrete inoltre caricare parti di disegni, bozze e modelli 3D già esistenti in tutta sicurezza.

Con noi, il vostro utensile speciale è a portata di mano. ZCC Cutting Tools Europe GmbH.



Effettuate subito l'accesso al nostro sito web per visualizzare il nuovo **Modulo per utensili speciali**.