

PUNTA AD INSERTI

Punta ad inserti

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**A**

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Punte ad inserti



ZD03	ZTD02	ZTD03	ZTD04	ZTD05	
16-58	13-50	13-73	13-59,5	17-50	Diametro
C30	C22	C24	C26	C28	Pagina



ZSD02	ZSD03	ZSD04	ZSD05	
12-63	12-63	12-63	12-63	Diametro
C10	C13	C16	C19	Pagina

Inserti - Foratura



SPGT-EM	SPGT-PM	SPMX-EM	SPMX-LM	SPMX-XM	WCMX-53	WCMX-D	WCMX-PG	
05 06 07 09 11 14	05 06 07 09 11 14	04 05 06 07 09 11 14	04 05 06 07 09 11 14	04 05 06 07 09 11 14	03 04 05 06 08	06 08	03 04 05 06 08	Lunghezza tagl.
C34	C34	C33	C33	C33	C35	C35	C35	Pagina

Foratura

XM

P

M



Geometria monolaterale per l'asportazione media. Geometria universale con un controllo del truciolo molto buono per acciaio e ghisa.

LM

P

M



Geometria monolaterale per l'asportazione media. Geometria con taglio dolce per un controllo del truciolo molto buono per lavorazione di acciai dolci.

PM

P

M

K



Per la lavorazione di acciaio, acciaio inossidabile e ghise.

EM

P

M

S



Per la lavorazione di acciaio, acciaio inossidabile e materiali a difficile asportazione.

PG

P

K



Per la lavorazione di acciaio e ghise.

D

P

M

K



Per la lavorazione di acciaio, acciaio inossidabile e ghise.

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53

P

M

K

N



Per la lavorazione di acciaio, acciaio inossidabile e Metalli non ferrosi.

[illegible]

Tornitura

Fresatura

Foratura

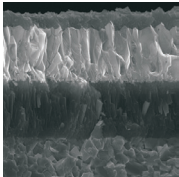
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A

Tornitura

Metallo duro rivestito CVD

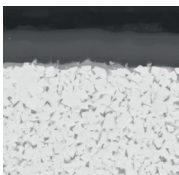
Grado	ISO	Microstruttura	Descrizione gradi
YB6338	P20 - P40 K20 - K40		Substrato in metallo duro rivestito in CVD P20-P40/K20-K40 per la lavorazione con velocità di taglio e avanzamento elevati di acciaio e materiali in ghisa.

B

Fresatura

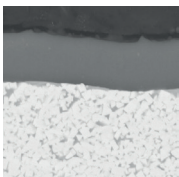
YBD252	K20 - K35		Grado di metallo duro con rivestimento in CVD K20-K35 per lavorazioni da media fino alla sgrossatura di materiali in ghisa e acciaio. Elevata resistenza all'usura e alla rottura ad alte velocità di taglio.
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Metallo duro rivestito PVD

Grado	ISO	Microstruttura	Descrizione gradi
YBG105	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

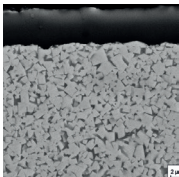
C

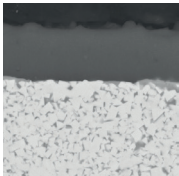
Foratura

YBG202	P10 - P30 M10 - M25		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.
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D

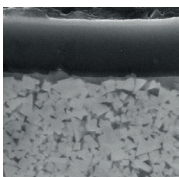
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tecniche

YBS203	S15 - S25		Per la lavorazione di materiali resistenti al calore. Uno speciale substrato in metallo duro e la più recente tecnologia di rivestimento PVD consentono un'ottima resistenza all'usura, un'elevata resistenza alla rottura e un'alta stabilità termica.
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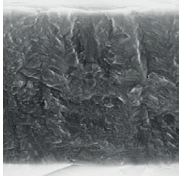
YBG205	P10 - P30 M20 - M40 S15-S25		Grado di metallo duro P10 - P30/M20 - M40/S15 - S25 con rivestimento in PVD multistrato per lavorazioni che spaziano dalla finitura all'asportazione media di acciaio inossidabile, superleghe e acciaio (fresatura). Resistenza all'usura e resistenza termica ottimali in un ampio campo di applicazione.
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E

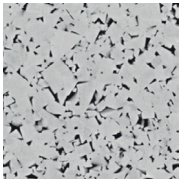
Indice

YB9320	P10 - P30 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 al
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Metallo duro rivestito PVD

Grado	ISO	Microstruttura	Descrizione gradi
YBG212	P25 - P35 M25-M40		Grado di metallo duro con rivestimento in PVD P25-P35/M25-M40 per la lavorazione di acciaio e acciaio inossidabile. Particolarmente adatto come inserto di centraggio per la foratura.

Metallo duro non rivestito

Grado	ISO	Microstruttura	Descrizione gradi
YD201	K10 - K30 N10 - N30		Substrato in metallo duro non rivestito K10-K30/N10-N30 per l'asportazione media di alluminio e altri materiali.

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Campi di applicazione dei gradi – punta ad inserti

	ISO	HC ¹ (CVD)	HC ¹ (PVD)	HT	HW	PCBN & PCD
A Tornitura	P01					
	P10					
	P20	YBD252	YBG202			
	P30	YB6338	YBG205			
	P40		YBG212			
B Fresatura	M01					
	M10		YBG202			
	M20		YB9320			
	M30		YBG205			
	M40		YBS203			
C Foratura	K01					
	K10	YBD252	YBG202			
	K20	YB6338	YBG205			
	K30					
	K40		YBG212			
D Informazioni tecniche	N01					
	N10					
	N20				YD201	
	N30					
E Indice	S01		YBG202			
	S10		YB9320			
	S20		YBG205			
	S30		YBS203			
	H01					
	H10					
	H20					
	H30					

P	Acciaio
M	Acciaio inossidabile
K	Ghisa

N	Metalli non ferrosi
S	Materiali a difficile asportazione
H	Materiali ad elevata durezza

HC¹ Carburo cementato rivestito
 HT Cermet non rivestito
 HW Metallo duro non rivestito

ZSD – 03 300 – XP – 32 S P 09 – 02

1	2	3	4	5	6	7	8	9
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Versione	
Code	Descrizione
ZSD	Punte ad inserti (SPMX*)
ZTD	Punte ad inserti (SPGT*)
ZD	Punte ad inserti (WCMX*)

1

Rapporto L/D	
Code	Descrizione
02	2xD
03	3xD
04	4xD
05	5xD

2

Diametro [mm]	
Code	Descrizione
130	13
...	

3

Versione del codolo	
Code	Descrizione
XP	Stelo Weldon

4

Diametro accoppiamento [mm]

5

Forma dell'inserto
W  S 

6

Angolo di spoglia inferiore	
Code	Descrizione
C	7°
P	11°

7

Lunghezza tagliente [mm]		
Code	Forma dell'inserto	
	 W	 S
03	3,8	
04	4,3	
05	5,4	5
06	6,5	6
08	8,7	7,94
09		9,8
11		11,5
12		12,7
14		14,3

8

Numero di denti

9**A**

Tornitura

B

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C

Foratura

D

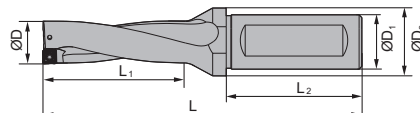
Informazioni tecniche

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Punta ad inserti

ZSD02



Articolo	*	Stock	Dimensioni [mm]							Inserto
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD02-120-XP20-SP04-02	*	•	12	20	25	27	50	94	0,162	SPMX040204**
ZSD02-125-XP20-SP04-02	*	•	12,5	20	25	28	50	95	0,164	SPMX040204**
ZSD02-130-XP20-SP04-02	*	•	13	20	25	29	50	96	0,167	SPMX040204**
ZSD02-135-XP20-SP04-02	*	•	13,5	20	25	30	50	97	0,169	SPMX040204**
ZSD02-140-XP20-SP04-02	*	•	14	20	25	31	50	98	0,172	SPMX040204**
ZSD02-145-XP20-SP04-02	*	•	14,5	20	25	32	50	99	0,176	SPMX040204**
ZSD02-150-XP20-SP05-02	*	•	15	20	25	33	50	100	0,179	SPMX050204**
ZSD02-155-XP20-SP05-02	*	•	15,5	20	25	34	50	101	0,185	SPMX050204**
ZSD02-160-XP20-SP05-02	*	•	16	20	25	35	50	102	0,189	SPMX050204**
ZSD02-165-XP20-SP05-02	*	•	16,5	20	25	36	50	103	0,193	SPMX050204**
ZSD02-170-XP20-SP05-02	*	•	17	20	25	37	50	104	0,201	SPMX050204**
ZSD02-175-XP20-SP05-02	*	•	17,5	20	25	38	50	105	0,207	SPMX050204**
ZSD02-180-XP25-SP06-02	*	•	18	25	32	39	56	113	0,304	SPMX060204**
ZSD02-185-XP25-SP06-02	*	•	18,5	25	32	40	56	114	0,308	SPMX060204**
ZSD02-190-XP25-SP06-02	*	•	19	25	32	41	56	115	0,313	SPMX060204**
ZSD02-195-XP25-SP06-02	*	•	19,5	25	32	42	56	116	0,317	SPMX060204**
ZSD02-200-XP25-SP06-02	*	•	20	25	32	43	56	117	0,323	SPMX060204**
ZSD02-205-XP25-SP06-02	*	•	20,5	25	32	44	56	118	0,327	SPMX060204**
ZSD02-210-XP25-SP06-02	*	•	21	25	32	45	56	119	0,33	SPMX060204**
ZSD02-215-XP25-SP06-02	*	•	21,5	25	32	46	56	120	0,341	SPMX060204**
ZSD02-220-XP25-SP06-02	*	•	22	25	32	47	56	121	0,346	SPMX060204**
ZSD02-225-XP25-SP07-02	*	•	22,5	25	32	48	56	122	0,34	SPMX07T308**
ZSD02-230-XP25-SP07-02	*	•	23	25	32	49	56	123	0,348	SPMX07T308**
ZSD02-235-XP25-SP07-02	*	•	23,5	25	32	50	56	124	0,353	SPMX07T308**
ZSD02-240-XP25-SP07-02	*	•	24	25	32	51	56	125	0,36	SPMX07T308**
ZSD02-245-XP25-SP07-02	*	•	24,5	25	32	52	56	126	0,367	SPMX07T308**
ZSD02-250-XP25-SP07-02	*	•	25	25	32	53	56	127	0,373	SPMX07T308**
ZSD02-255-XP25-SP07-02	*	•	25,5	25	32	54	56	128	0,382	SPMX07T308**
ZSD02-260-XP25-SP07-02	*	•	26	25	32	55	56	129	0,391	SPMX07T308**
ZSD02-265-XP25-SP07-02	*	○	26,5	25	32	56	56	130	0,4	SPMX07T308**
ZSD02-270-XP25-SP07-02	*	•	27	25	32	57	56	131	0,409	SPMX07T308**
ZSD02-275-XP25-SP07-02	*	•	27,5	25	32	58	56	132	0,418	SPMX07T308**
ZSD02-280-XP32-SP09-02	*	•	28	32	37	59	60	139	0,599	SPMX090408**

• In magazzino ○ Su richiesta

* Raffreddamento interno

Codice sistema > C9

Scelta gradi > C8

Informazioni tecniche > C201

Dati di taglio > C36

Articolo	*	Stock	Dimensioni [mm]							Inserto 
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD02-290-XP32-SP09-02	*	●	29	32	37	60	60	141	0,619	SPMX090408**
ZSD02-300-XP32-SP09-02	*	●	30	32	37	61	60	143	0,64	SPMX090408**
ZSD02-310-XP32-SP09-02	*	●	31	32	37	65	60	145	0,663	SPMX090408**
ZSD02-320-XP32-SP09-02	*	●	32	32	37	67	60	147	0,687	SPMX090408**
ZSD02-330-XP32-SP09-02	*	●	33	32	37	69	60	149	0,713	SPMX090408**
ZSD02-340-XP40-SP11-02	*	●	34	40	47	71	70	166	1,101	SPMX110408**
ZSD02-350-XP40-SP11-02	*	●	35	40	47	73	70	168	1,136	SPMX110408**
ZSD02-360-XP40-SP11-02	*	●	36	40	47	75	70	170	1,166	SPMX110408**
ZSD02-370-XP40-SP11-02	*	●	37	40	47	77	70	172	1,202	SPMX110408**
ZSD02-380-XP40-SP11-02	*	●	38	40	47	79	70	174	1,235	SPMX110408**
ZSD02-390-XP40-SP11-02	*	●	39	40	47	81	70	176	1,271	SPMX110408**
ZSD02-400-XP40-SP11-02	*	●	40	40	47	83	70	178	1,311	SPMX110408**
ZSD02-410-XP40-SP11-02	*	●	41	40	47	85	70	180	1,347	SPMX110408**
ZSD02-420-XP40-SP11-02	*	○	42	40	52	87	70	189	1,491	SPMX140512**
ZSD02-430-XP40-SP14-02	*	○	43	40	52	89	70	191	1,496	SPMX140512**
ZSD02-440-XP40-SP14-02	*	○	44	40	52	91	70	193	1,499	SPMX140512**
ZSD02-450-XP40-SP14-02	*	○	45	40	52	93	70	195	1,535	SPMX140512**
ZSD02-460-XP40-SP14-02	*	○	46	40	52	95	70	197	1,562	SPMX140512**
ZSD02-470-XP40-SP14-02	*	○	47	40	52	97	70	199	1,644	SPMX140512**
ZSD02-480-XP40-SP14-02	*	○	48	40	52	99	70	201	1,697	SPMX140512**
ZSD02-490-XP40-SP14-02	*	○	49	40	52	102	70	203	1,757	SPMX140512**
ZSD02-500-XP40-SP14-02	*	○	50	40	52	103	70	205	1,817	SPMX140512**
ZSD02-510-XP50-SP14-02	*	○	51	50	57	105	80	217	2,46	SPMX140512**
ZSD02-520-XP50-SP14-02	*	○	52	50	57	107	80	219	2,527	SPMX140512**
ZSD02-530-XP50-SP14-02	*	○	53	50	57	109	80	221	2,594	SPMX140512**
ZSD02-540-XP50-SP09-04	*	○	54	50	57	111	80	223	2,612	SPMX090408**
ZSD02-550-XP50-SP09-04	*	○	55	50	57	113	80	225	2,673	SPMX090408**
ZSD02-560-XP50-SP09-04	*	○	56	50	57	115	80	227	2,747	SPMX090408**
ZSD02-570-XP50-SP09-04	*	○	57	50	57	117	80	229	2,816	SPMX090408**
ZSD02-580-XP50-SP09-04	*	○	58	50	57	119	80	231	2,889	SPMX090408**
ZSD02-590-XP50-SP09-04	*	○	59	50	57	121	80	233	2,967	SPMX090408**
ZSD02-600-XP50-SP09-04	*	○	60	50	57	123	80	235	3,115	SPMX090408**
ZSD02-610-XP50-SP09-04	*	○	61	50	57	125	80	237	3,195	SPMX090408**
ZSD02-620-XP50-SP09-04	*	○	62	50	57	127	80	239	3,285	SPMX090408**
ZSD02-630-XP50-SP09-04	*	○	63	50	57	129	80	241	3,368	SPMX090408**

● In magazzino ○ Su richiesta

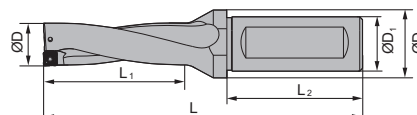
* Raffreddamento interno

Parti di ricambio								
	Inserto	SPMX040204**	SPMX050204**	SPMX060204**	SPMX07T308**	SPMX090408**	SPMX110408**	SPMX140512**
	Vite	I60M1.8x4 (0,5Nm)	I60M2x4.3 (0,5Nm)	I60M2.2x5.5 (0,8Nm)	I60M2.5x6.5 (1,0Nm)	I60M3.5x8 (2,7Nm)	I60M4x10 (3,4Nm)	I60M5x13 (6,7Nm)
	Chiave	WT05IP	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

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Inserto

C33

Punta ad inserti**ZSD03**

Articolo	*	Stock	Dimensioni [mm]							Inserto
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD03-120-XP20-SP04-02	*	•	12	20	25	39	50	105	0,165	SPMX040204**
ZSD03-125-XP20-SP04-02	*	•	12,5	20	25	41	50	107	0,169	SPMX040204**
ZSD03-130-XP20-SP04-02	*	•	13	20	25	42	50	108	0,171	SPMX040204**
ZSD03-135-XP20-SP04-02	*	•	13,5	20	25	44	50	110	0,175	SPMX040204**
ZSD03-140-XP20-SP04-02	*	•	14	20	25	45	50	111	0,178	SPMX040204**
ZSD03-145-XP20-SP04-02	*	•	14,5	20	25	47	50	113	0,182	SPMX040204**
ZSD03-150-XP20-SP05-02	*	•	15	20	25	48	50	114	0,189	SPMX050204**
ZSD03-155-XP20-SP05-02	*	•	15,5	20	25	50	50	116	0,192	SPMX050204**
ZSD03-160-XP20-SP05-02	*	•	16	20	25	51	50	117	0,201	SPMX050204**
ZSD03-165-XP20-SP05-02	*	•	16,5	20	25	53	50	119	0,203	SPMX050204**
ZSD03-170-XP20-SP05-02	*	•	17	20	25	54	50	120	0,205	SPMX050204**
ZSD03-175-XP20-SP05-02	*	•	17,5	20	25	56	50	122	0,206	SPMX050204**
ZSD03-180-XP25-SP06-02	*	•	18	25	32	57	56	131	0,319	SPMX060204**
ZSD03-185-XP25-SP06-02	*	•	18,5	25	32	59	56	133	0,326	SPMX060204**
ZSD03-190-XP25-SP06-02	*	•	19	25	32	60	56	134	0,332	SPMX060204**
ZSD03-195-XP25-SP06-02	*	•	19,5	25	32	62	56	136	0,339	SPMX060204**
ZSD03-200-XP25-SP06-02	*	•	20	25	32	63	56	137	0,344	SPMX060204**
ZSD03-205-XP25-SP06-02	*	•	20,5	25	32	65	56	139	0,352	SPMX060204**
ZSD03-210-XP25-SP06-02	*	•	21	25	32	66	56	140	0,368	SPMX060204**
ZSD03-215-XP25-SP06-02	*	•	21,5	25	32	68	56	142	0,37	SPMX060204**
ZSD03-220-XP25-SP06-02	*	•	22	25	32	69	56	143	0,375	SPMX060204**
ZSD03-225-XP25-SP07-02	*	•	22,5	25	32	71	56	145	0,397	SPMX07T308**
ZSD03-230-XP25-SP07-02	*	•	23	25	32	72	56	147	0,383	SPMX07T308**
ZSD03-235-XP25-SP07-02	*	•	23,5	25	32	74	56	149	0,395	SPMX07T308**
ZSD03-240-XP25-SP07-02	*	•	24	25	32	75	56	150	0,406	SPMX07T308**
ZSD03-245-XP25-SP07-02	*	•	24,5	25	32	77	56	152	0,423	SPMX07T308**
ZSD03-250-XP25-SP07-02	*	•	25	25	32	78	56	153	0,431	SPMX07T308**
ZSD03-255-XP25-SP07-02	*	•	25,5	25	32	80	56	155	0,44	SPMX07T308**
ZSD03-260-XP25-SP07-02	*	•	26	25	32	81	56	156	0,453	SPMX07T308**
ZSD03-265-XP25-SP07-02	*	•	26,5	25	32	83	56	158	0,467	SPMX07T308**
ZSD03-270-XP25-SP07-02	*	•	27	25	32	84	56	160	0,504	SPMX07T308**
ZSD03-275-XP25-SP07-02	*	•	27,5	25	32	86	56	162	0,682	SPMX07T308**
ZSD03-280-XP32-SP09-02	*	•	28	32	37	87	60	169	0,707	SPMX090408**

• In magazzino ○ Su richiesta

* Raffreddamento interno

Codice sistema > C9

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Dati di taglio > C36

Articolo	*	Stock	Dimensioni [mm]							Inserto
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD03-290-XP32-SP09-02	*	•	29	32	37	90	60	172	0,739	SPMX090408**
ZSD03-300-XP32-SP09-02	*	•	30	32	37	93	60	175	0,754	SPMX090408**
ZSD03-310-XP32-SP09-02	*	•	31	32	37	96	60	178	0,771	SPMX090408**
ZSD03-320-XP32-SP09-02	*	•	32	32	37	99	60	181	0,806	SPMX090408**
ZSD03-330-XP32-SP09-02	*	•	33	32	37	102	60	184	0,847	SPMX090408**
ZSD03-340-XP40-SP11-02	*	•	34	40	47	105	70	200	1,208	SPMX110408**
ZSD03-350-XP40-SP11-02	*	•	35	40	47	108	70	203	1,248	SPMX110408**
ZSD03-360-XP40-SP11-02	*	•	36	40	47	111	70	206	1,302	SPMX110408**
ZSD03-370-XP40-SP11-02	*	•	37	40	47	114	70	209	1,341	SPMX110408**
ZSD03-380-XP40-SP11-02	*	•	38	40	47	117	70	212	1,395	SPMX110408**
ZSD03-390-XP40-SP11-02	*	•	39	40	47	120	70	215	1,447	SPMX110408**
ZSD03-400-XP40-SP11-02	*	•	40	40	47	123	70	218	1,505	SPMX110408**
ZSD03-410-XP40-SP11-02	*	•	41	40	47	126	70	221	1,549	SPMX110408**
ZSD03-420-XP40-SP11-02	*	○	42	40	52	129	70	231	1,716	SPMX140512**
ZSD03-430-XP40-SP14-02	*	•	43	40	52	132	70	234	1,656	SPMX140512**
ZSD03-440-XP40-SP14-02	*	○	44	40	52	135	70	237	1,708	SPMX140512**
ZSD03-450-XP40-SP14-02	*	○	45	40	52	138	70	240	1,776	SPMX140512**
ZSD03-460-XP40-SP14-02	*	○	46	40	52	141	70	243	1,851	SPMX140512**
ZSD03-470-XP40-SP14-02	*	○	47	40	52	144	70	245	1,924	SPMX140512**
ZSD03-480-XP40-SP14-02	*	○	48	40	52	147	70	249	2,003	SPMX140512**
ZSD03-490-XP40-SP14-02	*	○	49	40	52	150	70	252	2,094	SPMX140512**
ZSD03-500-XP40-SP14-02	*	○	50	40	52	153	70	255	2,184	SPMX140512**
ZSD03-510-XP50-SP14-02	*	○	51	50	57	156	80	268	2,882	SPMX140512**
ZSD03-520-XP50-SP14-02	*	○	52	50	57	159	80	271	2,974	SPMX140512**
ZSD03-530-XP50-SP14-02	*	○	53	50	57	162	80	274	3,071	SPMX140512**
ZSD03-540-XP50-SP09-04	*	○	54	50	57	165	80	277	3,116	SPMX090408**
ZSD03-550-XP50-SP09-04	*	○	55	50	57	168	80	280	3,208	SPMX090408**
ZSD03-560-XP50-SP09-04	*	○	56	50	57	171	80	283	3,315	SPMX090408**
ZSD03-570-XP50-SP09-04	*	○	57	50	57	174	80	286	3,499	SPMX090408**
ZSD03-580-XP50-SP09-04	*	○	58	50	57	177	80	289	3,53	SPMX090408**
ZSD03-590-XP50-SP09-04	*	○	59	50	57	180	80	292	3,649	SPMX090408**
ZSD03-600-XP50-SP09-04	*	○	60	50	57	183	80	295	3,838	SPMX090408**
ZSD03-610-XP50-SP09-04	*	○	61	50	57	186	80	298	3,961	SPMX090408**
ZSD03-620-XP50-SP09-04	*	○	62	50	57	189	80	301	4,103	SPMX090408**
ZSD03-630-XP50-SP09-04	*	○	63	50	57	192	80	304	4,238	SPMX090408**

• In magazzino ○ Su richiesta

* Raffreddamento interno

Parti di ricambio								
	Inserto	SPMX040204**	SPMX050204**	SPMX060204**	SPMX07T308**	SPMX090408**	SPMX110408**	SPMX140512**
	Vite	I60M1.8x4 (0,5Nm)	I60M2x4.3 (0,5Nm)	I60M2.2x5.5 (0,8Nm)	I60M2.5x6.5 (1,0Nm)	I60M3.5x8 (2,7Nm)	I60M4x10 (3,4Nm)	I60M5x13 (6,7Nm)
	Chiave	WT05IP	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

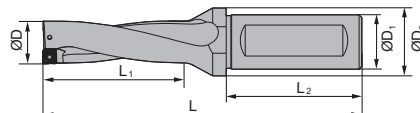
Inserto

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Punta ad inserti

ZSD04



Articolo	*	Stock	Dimensioni [mm]							Inserto
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD04-120-XP20-SP04-02	*	•	12	20	25	51	50	117	0,169	SPMX040204**
ZSD04-125-XP20-SP04-02	*	•	12,5	20	25	53	50	119	0,173	SPMX040204**
ZSD04-130-XP20-SP04-02	*	•	13	20	25	55	50	121	0,177	SPMX040204**
ZSD04-135-XP20-SP04-02	*	•	13,5	20	25	57	50	123	0,181	SPMX040204**
ZSD04-140-XP20-SP04-02	*	•	14	20	25	59	50	125	0,186	SPMX040204**
ZSD04-145-XP20-SP04-02	*	•	14,5	20	25	61	50	127	0,191	SPMX040204**
ZSD04-150-XP20-SP05-02	*	•	15	20	25	63	50	129	0,2	SPMX050204**
ZSD04-155-XP20-SP05-02	*	•	15,5	20	25	65	50	131	0,203	SPMX050204**
ZSD04-160-XP20-SP05-02	*	•	16	20	25	67	50	133	0,207	SPMX050204**
ZSD04-165-XP20-SP05-02	*	•	16,5	20	25	69	50	135	0,214	SPMX050204**
ZSD04-170-XP20-SP05-02	*	•	17	20	25	71	50	137	0,218	SPMX050204**
ZSD04-175-XP20-SP05-02	*	•	17,5	20	25	73	50	139	0,222	SPMX050204**
ZSD04-180-XP25-SP06-02	*	•	18	25	32	75	56	149	0,34	SPMX060204**
ZSD04-185-XP25-SP06-02	*	•	18,5	25	32	77	56	151	0,341	SPMX060204**
ZSD04-190-XP25-SP06-02	*	•	19	25	32	79	56	153	0,369	SPMX060204**
ZSD04-195-XP25-SP06-02	*	•	19,5	25	32	81	56	155	0,382	SPMX060204**
ZSD04-200-XP25-SP06-02	*	•	20	25	32	83	56	157	0,367	SPMX060204**
ZSD04-205-XP25-SP06-02	*	•	20,5	25	32	85	56	159	0,37	SPMX060204**
ZSD04-210-XP25-SP06-02	*	•	21	25	32	87	56	161	0,413	SPMX060204**
ZSD04-215-XP25-SP06-02	*	•	21,5	25	32	89	56	163	0,426	SPMX060204**
ZSD04-220-XP25-SP06-02	*	•	22	25	32	91	56	165	0,441	SPMX060204**
ZSD04-225-XP25-SP07-02	*	•	22,5	25	32	93	56	167	0,407	SPMX07T308**
ZSD04-230-XP25-SP07-02	*	•	23	25	32	95	56	170	0,421	SPMX07T308**
ZSD04-235-XP25-SP07-02	*	•	23,5	25	32	97	56	172	0,483	SPMX07T308**
ZSD04-240-XP25-SP07-02	*	•	24	25	32	99	56	174	0,502	SPMX07T308**
ZSD04-245-XP25-SP07-02	*	•	24,5	25	32	101	56	176	0,517	SPMX07T308**
ZSD04-250-XP25-SP07-02	*	•	25	25	32	103	56	178	0,52	SPMX07T308**
ZSD04-255-XP25-SP07-02	*	•	25,5	25	32	105	56	181	0,5	SPMX07T308**
ZSD04-260-XP25-SP07-02	*	•	26	25	32	107	56	182	0,512	SPMX07T308**
ZSD04-265-XP25-SP07-02	*	•	26,5	25	32	109	56	184	0,52	SPMX07T308**
ZSD04-270-XP25-SP07-02	*	•	27	25	32	111	56	187	0,617	SPMX07T308**
ZSD04-275-XP25-SP07-02	*	•	27,5	25	32	113	56	190	0,642	SPMX07T308**
ZSD04-280-XP32-SP09-02	*	○	28	32	37	115	60	199	0,748	SPMX090408**

• In magazzino ○ Su richiesta

* Raffreddamento interno

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Dati di taglio > C36

Articolo	*	Stock	Dimensioni [mm]							Inserto 
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD04-290-XP32-SP09-02	*	●	29	32	37	119	60	203	0,793	SPMX090408**
ZSD04-300-XP32-SP09-02	*	●	30	32	37	123	60	207	0,832	SPMX090408**
ZSD04-305-XP32-SP09-02	*	●	30,5	32	37	125	60	209	0,854	SPMX090408**
ZSD04-310-XP32-SP09-02	*	●	31	32	37	127	60	211	0,872	SPMX090408**
ZSD04-320-XP32-SP09-02	*	●	32	32	37	131	60	215	0,922	SPMX090408**
ZSD04-330-XP32-SP09-02	*	●	33	32	37	135	60	219	0,973	SPMX090408**
ZSD04-340-XP40-SP11-02	*	●	34	40	47	139	70	234	1,326	SPMX110408**
ZSD04-350-XP40-SP11-02	*	●	35	40	47	143	70	238	1,384	SPMX110408**
ZSD04-360-XP40-SP11-02	*	●	36	40	47	147	70	242	1,445	SPMX110408**
ZSD04-370-XP40-SP11-02	*	●	37	40	47	151	70	246	1,499	SPMX110408**
ZSD04-380-XP40-SP11-02	*	●	38	40	47	155	70	250	1,563	SPMX110408**
ZSD04-390-XP40-SP11-02	*	●	39	40	47	159	70	254	1,629	SPMX110408**
ZSD04-400-XP40-SP11-02	*	●	40	40	47	163	70	258	1,697	SPMX110408**
ZSD04-405-XP40-SP11-02	*	●	40,5	40	47	165	70	260	1,737	SPMX110408**
ZSD04-410-XP40-SP11-02	*	●	41	40	47	167	70	262	1,775	SPMX110408**
ZSD04-420-XP40-SP11-02	*	○	42	40	52	171	70	273	1,948	SPMX140512**
ZSD04-430-XP40-SP14-02	*	○	43	40	52	175	70	277	1,952	SPMX140512**
ZSD04-440-XP40-SP14-02	*	○	44	40	52	179	70	281	1,962	SPMX140512**
ZSD04-450-XP40-SP14-02	*	○	45	40	52	183	70	285	2,06	SPMX140512**
ZSD04-460-XP40-SP14-02	*	○	46	40	52	187	70	289	2,157	SPMX140512**
ZSD04-470-XP40-SP14-02	*	●	47	40	52	191	70	293	2,256	SPMX140512**
ZSD04-480-XP40-SP14-02	*	○	48	40	52	195	70	297	2,361	SPMX140512**
ZSD04-490-XP40-SP14-02	*	○	49	40	52	199	70	301	2,489	SPMX140512**
ZSD04-500-XP40-SP14-02	*	○	50	40	52	203	70	305	2,589	SPMX140512**
ZSD04-510-XP50-SP14-02	*	○	51	50	57	207	80	319	3,292	SPMX140512**
ZSD04-520-XP50-SP14-02	*	○	52	50	57	211	80	323	3,435	SPMX140512**
ZSD04-530-XP50-SP14-02	*	○	53	50	57	215	80	327	3,574	SPMX140512**
ZSD04-540-XP50-SP09-04	*	○	54	50	57	219	80	331	3,604	SPMX090408**
ZSD04-550-XP50-SP09-04	*	○	55	50	57	223	80	335	3,731	SPMX090408**
ZSD04-560-XP50-SP09-04	*	○	56	50	57	227	80	339	3,868	SPMX090408**
ZSD04-570-XP50-SP09-04	*	○	57	50	57	231	80	343	4,01	SPMX090408**
ZSD04-580-XP50-SP09-04	*	○	58	50	57	235	80	347	4,156	SPMX090408**
ZSD04-590-XP50-SP09-04	*	○	59	50	57	239	80	351	4,312	SPMX090408**
ZSD04-600-XP50-SP09-04	*	○	60	50	57	243	80	355	4,558	SPMX090408**
ZSD04-610-XP50-SP09-04	*	○	61	50	57	247	80	359	4,72	SPMX090408**
ZSD04-620-XP50-SP09-04	*	○	62	50	57	251	80	363	4,886	SPMX090408**
ZSD04-630-XP50-SP09-04	*	○	63	50	57	255	80	367	5,068	SPMX090408**

● In magazzino ○ Su richiesta

* Raffreddamento interno

Parti di ricambio								
	Inserto	SPMX040204**	SPMX050204**	SPMX060204**	SPMX07T308**	SPMX090408**	SPMX110408**	SPMX140512**
	Vite	I60M1.8x4 (0,5Nm)	I60M2x4.3 (0,5Nm)	I60M2.2x5.5 (0,8Nm)	I60M2.5x6.5 (1,0Nm)	I60M3.5x8 (2,7Nm)	I60M4x10 (3,4Nm)	I60M5x13 (6,7Nm)
	Chiave	WT05IP	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

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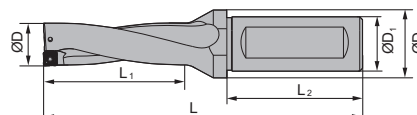
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Punta ad inserti**ZSD05**

Articolo	*	Stock	Dimensioni [mm]							Inserto
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD05-120-XP20-SP04-02	*	•	12	20	25	63	50	129	0,173	SPMX040204**
ZSD05-125-XP20-SP04-02	*	•	12,5	20	25	66	50	132	0,179	SPMX040204**
ZSD05-130-XP20-SP04-02	*	•	13	20	25	68	50	134	0,183	SPMX040204**
ZSD05-135-XP20-SP04-02	*	•	13,5	20	25	71	50	137	0,189	SPMX040204**
ZSD05-140-XP20-SP04-02	*	•	14	20	25	73	50	139	0,194	SPMX040204**
ZSD05-145-XP20-SP04-02	*	•	14,5	20	25	76	50	141	0,2	SPMX040204**
ZSD05-150-XP20-SP05-02	*	•	15	20	25	78	50	144	0,206	SPMX050204**
ZSD05-155-XP20-SP05-02	*	•	15,5	20	25	81	50	147	0,214	SPMX050204**
ZSD05-160-XP20-SP05-02	*	•	16	20	25	83	50	149	0,219	SPMX050204**
ZSD05-165-XP20-SP05-02	*	•	16,5	20	25	86	50	152	0,223	SPMX050204**
ZSD05-170-XP20-SP05-02	*	•	17	20	25	88	50	154	0,23	SPMX050204**
ZSD05-175-XP20-SP05-02	*	•	17,5	20	25	91	50	157	0,239	SPMX050204**
ZSD05-180-XP25-SP06-02	*	•	18	25	32	93	56	167	0,355	SPMX060204**
ZSD05-185-XP25-SP06-02	*	•	18,5	25	32	96	56	170	0,36	SPMX060204**
ZSD05-190-XP25-SP06-02	*	•	19	25	32	98	56	172	0,369	SPMX060204**
ZSD05-195-XP25-SP06-02	*	•	19,5	25	32	101	56	175	0,382	SPMX060204**
ZSD05-200-XP25-SP06-02	*	•	20	25	32	103	56	177	0,39	SPMX060204**
ZSD05-205-XP25-SP06-02	*	•	20,5	25	32	106	56	180	0,401	SPMX060204**
ZSD05-210-XP25-SP06-02	*	•	21	25	32	108	56	182	0,413	SPMX060204**
ZSD05-215-XP25-SP06-02	*	•	21,5	25	32	111	56	185	0,426	SPMX060204**
ZSD05-220-XP25-SP06-02	*	•	22	25	32	113	56	187	0,441	SPMX060204**
ZSD05-225-XP25-SP07-02	*	•	22,5	25	32	116	56	190	0,442	SPMX07T308**
ZSD05-230-XP25-SP07-02	*	•	23	25	32	118	56	194	0,461	SPMX07T308**
ZSD05-235-XP25-SP07-02	*	•	23,5	25	32	121	56	197	0,483	SPMX07T308**
ZSD05-240-XP25-SP07-02	*	•	24	25	32	123	56	199	0,497	SPMX07T308**
ZSD05-245-XP25-SP07-02	*	•	24,5	25	32	126	56	202	0,517	SPMX07T308**
ZSD05-250-XP25-SP07-02	*	•	25	25	32	128	56	204	0,533	SPMX07T308**
ZSD05-255-XP25-SP07-02	*	•	25,5	25	32	131	56	207	0,555	SPMX07T308**
ZSD05-260-XP25-SP07-02	*	•	26	25	32	133	56	209	0,571	SPMX07T308**
ZSD05-265-XP25-SP07-02	*	•	26,5	25	32	136	56	212	0,593	SPMX07T308**
ZSD05-270-XP25-SP07-02	*	•	27	25	32	138	56	214	0,617	SPMX07T308**
ZSD05-275-XP25-SP07-02	*	•	27,5	25	32	141	56	217	0,642	SPMX07T308**
ZSD05-280-XP32-SP09-02	*	•	28	32	37	143	60	223	0,791	SPMX090408**

• In magazzino ○ Su richiesta

* Raffreddamento interno

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Articolo	*	Stock	Dimensioni [mm]							Inserto
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD05-290-XP32-SP09-02	*	•	29	32	37	148	60	228	0,837	SPMX090408**
ZSD05-300-XP32-SP09-02	*	•	30	32	37	153	60	233	0,943	SPMX090408**
ZSD05-310-XP32-SP09-02	*	•	31	32	37	158	60	238	0,943	SPMX090408**
ZSD05-320-XP32-SP09-02	*	•	32	32	37	163	60	243	1,001	SPMX090408**
ZSD05-330-XP32-SP09-02	*	•	33	32	37	168	60	249	1,067	SPMX090408**
ZSD05-340-XP40-SP11-02	*	•	34	40	47	173	70	268	1,44	SPMX110408**
ZSD05-350-XP40-SP11-02	*	•	35	40	47	178	70	273	1,505	SPMX110408**
ZSD05-360-XP40-SP11-02	*	•	36	40	47	183	70	278	1,575	SPMX110408**
ZSD05-370-XP40-SP11-02	*	•	37	40	47	188	70	283	1,723	SPMX110408**
ZSD05-380-XP40-SP11-02	*	•	38	40	47	193	70	288	1,723	SPMX110408**
ZSD05-390-XP40-SP11-02	*	•	39	40	47	198	70	293	1,808	SPMX110408**
ZSD05-400-XP40-SP11-02	*	•	40	40	47	203	70	298	1,894	SPMX110408**
ZSD05-410-XP40-SP11-02	*	•	41	40	47	208	70	303	1,991	SPMX110408**
ZSD05-420-XP40-SP11-02	*	○	42	40	52	213	70	315	2,182	SPMX140512**
ZSD05-430-XP40-SP14-02	*	•	43	40	52	218	70	320	2,11	SPMX140512**
ZSD05-440-XP40-SP14-02	*	•	44	40	52	223	70	325	2,22	SPMX140512**
ZSD05-450-XP40-SP14-02	*	•	45	40	52	228	70	330	2,331	SPMX140512**
ZSD05-460-XP40-SP14-02	*	•	46	40	52	233	70	335	2,45	SPMX140512**
ZSD05-470-XP40-SP14-02	*	○	47	40	52	238	70	340	2,582	SPMX140512**
ZSD05-480-XP40-SP14-02	*	•	48	40	52	243	70	345	2,693	SPMX140512**
ZSD05-490-XP40-SP14-02	*	•	49	40	52	248	70	350	2,823	SPMX140512**
ZSD05-500-XP40-SP14-02	*	•	50	40	52	253	70	355	2,958	SPMX140512**
ZSD05-510-XP50-SP14-02	*	○	51	50	57	258	80	370	3,7	SPMX140512**
ZSD05-520-XP50-SP14-02	*	○	52	50	57	263	80	375	3,848	SPMX140512**
ZSD05-530-XP50-SP14-02	*	○	53	50	57	268	80	380	3,998	SPMX140512**
ZSD05-540-XP50-SP09-04	*	○	54	50	57	273	80	385	4,035	SPMX090408**
ZSD05-550-XP50-SP09-04	*	○	55	50	57	278	80	390	4,203	SPMX090408**
ZSD05-560-XP50-SP09-04	*	○	56	50	57	283	80	395	4,368	SPMX090408**
ZSD05-570-XP50-SP09-04	*	○	57	50	57	288	80	400	4,671	SPMX090408**
ZSD05-580-XP50-SP09-04	*	○	58	50	57	293	80	405	4,866	SPMX090408**
ZSD05-590-XP50-SP09-04	*	○	59	50	57	298	80	410	5,047	SPMX090408**
ZSD05-600-XP50-SP09-04	*	○	60	50	57	303	80	415	5,192	SPMX090408**
ZSD05-610-XP50-SP09-04	*	○	61	50	57	308	80	420	5,4	SPMX090408**
ZSD05-620-XP50-SP09-04	*	○	62	50	57	313	80	425	5,619	SPMX090408**
ZSD05-630-XP50-SP09-04	*	○	63	50	57	318	80	430	5,834	SPMX090408**

• In magazzino ○ Su richiesta

* Raffreddamento interno

Parti di ricambio

Inserto	SPMX040204**	SPMX050204**	SPMX060204**	SPMX07T308**	SPMX090408**	SPMX110408**	SPMX140512**
Vite	I60M1.8x4 (0,5Nm)	I60M2x4.3 (0,5Nm)	I60M2.2x5.5 (0,8Nm)	I60M2.5x6.5 (1,0Nm)	I60M3.5x8 (2,7Nm)	I60M4x10 (3,4Nm)	I60M5x13 (6,7Nm)
Chiave	WT05IP	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

Codice sistema > C9

Scelta gradi > C8

Informazioni tecniche > C201

Dati di taglio > C36

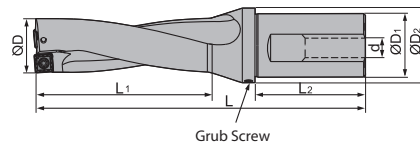
Inserto

C33

A
Tornitura
B
Fresatura
C
Foratura
D
Informazioni tecniche
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Indice

Punta ad inserti

ZTD02



Articolo	✱	Stock	Dimensioni [mm]									Inserto 
			ØD	ØD1	ØD2	L1	L2	L	d			
ZTD02-130-XP20-SP05-02	✱	●	13	20	25	31	50	98	M13×1	0,165	SPGT0502**	
ZTD02-140-XP20-SP05-02	✱	●	14	20	25	33	50	100	M13×1	0,171	SPGT0502**	
ZTD02-150-XP20-SP05-02	✱	●	15	20	25	35	50	102	M13×1	0,176	SPGT0502**	
ZTD02-160-XP20-SP05-02	✱	●	16	20	25	37	50	104	M13×1	0,184	SPGT0502**	
ZTD02-170-XP25-SP06-02	✱	●	17	25	32	39	56	117	M16×1,5	0,325	SPGT0602**	
ZTD02-180-XP25-SP06-02	✱	●	18	25	32	41	56	119	M16×1,5	0,332	SPGT0602**	
ZTD02-190-XP25-SP06-02	✱	●	19	25	32	43	56	121	M16×1,5	0,342	SPGT0602**	
ZTD02-200-XP25-SP06-02	✱	●	20	25	32	45	56	123	M16×1,5	0,353	SPGT0602**	
ZTD02-210-XP25-SP06-02	✱	●	21	25	32	47	56	125	M16×1,5	0,35	SPGT0602**	
ZTD02-220-XP25-SP07-02	✱	●	22	25	32	49	56	127	M16×1,5	0,367	SPGT07T3**	
ZTD02-230-XP25-SP07-02	✱	●	23	25	32	51	56	129	M16×1,5	0,38	SPGT07T3**	
ZTD02-235-XP25-SP07-02	✱	○	23,5	25	32	52	56	130	M16×1,5	0,361	SPGT07T3**	
ZTD02-240-XP25-SP07-02	✱	●	24	25	32	53	56	131	M16×1,5	0,443	SPGT07T3**	
ZTD02-250-XP25-SP07-02	✱	●	25	25	32	55	56	133	M16×1,5	0,41	SPGT07T3**	
ZTD02-260-XP25-SP07-02	✱	●	26	25	32	57	56	135	M16×1,5	0,454	SPGT07T3**	
ZTD02-270-XP25-SP07-02	✱	●	27	25	32	59	56	137	M16×1,5	0,445	SPGT07T3**	
ZTD02-280-XP32-SP09-02	✱	●	28	32	37	61	60	146	M22×2	0,661	SPGT0904**	
ZTD02-290-XP32-SP09-02	✱	●	29	32	37	63	60	148	M22×2	0,682	SPGT0904**	
ZTD02-300-XP32-SP09-02	✱	●	30	32	37	65	60	150	M22×2	0,702	SPGT0904**	
ZTD02-310-XP32-SP09-02	✱	●	31	32	37	67	60	152	M22×2	0,759	SPGT0904**	
ZTD02-320-XP32-SP09-02	✱	●	32	32	37	69	60	154	M22×2	0,742	SPGT0904**	
ZTD02-330-XP32-SP09-02	✱	●	33	32	37	71	60	156	M22×2	0,774	SPGT0904**	
ZTD02-340-XP40-SP11-02	✱	●	34	40	47	73	70	173	(BSPT)RC1/4	1,2	SPGT1104**	
ZTD02-350-XP40-SP11-02	✱	●	35	40	47	75	70	175	(BSPT)RC1/4	1,23	SPGT1104**	
ZTD02-360-XP40-SP11-02	✱	●	36	40	47	77	70	177	(BSPT)RC1/4	1,26	SPGT1104**	
ZTD02-370-XP40-SP11-02	✱	●	37	40	47	79	70	179	(BSPT)RC1/4	1,29	SPGT1104**	
ZTD02-380-XP40-SP11-02	✱	●	38	40	47	81	70	181	(BSPT)RC1/4	1,33	SPGT1104**	
ZTD02-390-XP40-SP11-02	✱	●	39	40	47	83	70	183	(BSPT)RC1/4	1,39	SPGT1104**	
ZTD02-400-XP40-SP11-02	✱	●	40	40	47	85	70	185	(BSPT)RC1/4	1,43	SPGT1104**	
ZTD02-410-XP40-SP11-02	✱	●	41	40	47	87	70	187	(BSPT)RC1/4	1,44	SPGT1104**	
ZTD02-420-XP40-SP14-02	✱	●	42	40	52	89	70	199	(BSPT)RC1/4	1,62	SPGT1405**	
ZTD02-430-XP40-SP14-02	✱	●	43	40	52	91	70	201	(BSPT)RC1/4	1,67	SPGT1405**	
ZTD02-440-XP40-SP14-02	✱	●	44	40	52	93	70	203	(BSPT)RC1/4	1,71	SPGT1405**	

• In magazzino ◦ Su richiesta

* Raffreddamento interno

Codice sistema > C9

Scelta gradi > C8

Informazioni tecniche > C201

Dati di taglio > C36

Articolo	*	Stock	Dimensioni [mm]								Inserto 
			ØD	ØD1	ØD2	L1	L2	L	d		
ZTD02-450-XP40-SP14-02	*	•	45	40	52	95	70	205	(BSPT)RC1/4	1,76	SPGT1405**
ZTD02-460-XP40-SP14-02	*	•	46	40	52	97	70	207	(BSPT)RC1/4	1,81	SPGT1405**
ZTD02-470-XP40-SP14-02	*	•	47	40	52	99	70	209	(BSPT)RC1/4	1,87	SPGT1405**
ZTD02-480-XP40-SP14-02	*	•	48	40	52	101	70	211	(BSPT)RC1/4	1,92	SPGT1405**
ZTD02-490-XP40-SP14-02	*	•	49	40	52	103	70	213	(BSPT)RC1/4	1,98	SPGT1405**
ZTD02-500-XP40-SP14-02	*	•	50	40	52	105	70	215	(BSPT)RC1/4	2,05	SPGT1405**

• In magazzino ◦ Su richiesta

* Raffreddamento interno

Parti di ricambio							
	Inserto	SPGT0502**	SPGT0602**	SPGT07T3**	SPGT0904**	SPGT1104**	SPGT1405**
	Vita senza testa					M6×6 (7,0Nm)	M8×8 (10,2Nm)
	Vite	I60M2×4.3 (0,5Nm)	I60M2.2×5.5 (0,8Nm)	I60M2.5×6.5 (1,0Nm)	I60M3.5×8 (2,7Nm)	I60M4×10 (3,4Nm)	I60M5×13 (6,7Nm)
	Chiave	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

Inserto



C34

A

Tornitura

B

Fresatura

C

Foratura

D

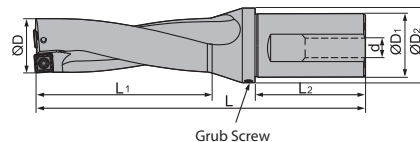
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Punta ad inserti

ZTD03



Articolo	✱	Stock	Dimensioni [mm]									Inserto 
			ØD	ØD1	ØD2	L1	L2	L	d			
ZTD03-130-XP20-SP05-02	✱	●	13	20	25	44	50	111	M13×1	0,179	SPGT0502**	
ZTD03-140-XP20-SP05-02	✱	●	14	20	25	47	50	114	M13×1	0,186	SPGT0502**	
ZTD03-150-XP20-SP05-02	✱	●	15	20	25	50	50	117	M13×1	0,195	SPGT0502**	
ZTD03-160-XP20-SP05-02	✱	●	16	20	25	53	50	120	M13×1	0,214	SPGT0502**	
ZTD03-170-XP25-SP06-02	✱	●	17	25	32	56	56	134	M16×1,5	0,32	SPGT0602**	
ZTD03-180-XP25-SP06-02	✱	●	18	25	32	59	56	137	M16×1,5	0,331	SPGT0602**	
ZTD03-190-XP25-SP06-02	✱	●	19	25	32	62	56	140	M16×1,5	0,342	SPGT0602**	
ZTD03-200-XP25-SP06-02	✱	●	20	25	32	65	56	143	M16×1,5	0,356	SPGT0602**	
ZTD03-210-XP25-SP06-02	✱	●	21	25	32	68	56	146	M16×1,5	0,391	SPGT0602**	
ZTD03-220-XP25-SP07-02	✱	●	22	25	32	71	56	149	M16×1,5	0,391	SPGT07T3**	
ZTD03-230-XP25-SP07-02	✱	●	23	25	32	74	56	152	M16×1,5	0,442	SPGT07T3**	
ZTD03-240-XP25-SP07-02	✱	●	24	25	32	77	56	155	M16×1,5	0,485	SPGT07T3**	
ZTD03-250-XP25-SP07-02	✱	●	25	25	32	80	56	158	M16×1,5	0,492	SPGT07T3**	
ZTD03-260-XP25-SP07-02	✱	●	26	25	32	83	56	161	M16×1,5	0,497	SPGT07T3**	
ZTD03-270-XP25-SP07-02	✱	●	27	25	32	86	56	164	M16×1,5	0,521	SPGT07T3**	
ZTD03-280-XP32-SP09-02	✱	●	28	32	37	89	60	174	M22×2	0,75	SPGT0904**	
ZTD03-285-XP32-SP09-02	✱	○	28,5	32	37	91	60	171	M22x2	0,699	SPGT0904**	
ZTD03-290-XP32-SP09-02	✱	●	29	32	37	92	60	177	M22×2	0,777	SPGT0904**	
ZTD03-300-XP32-SP09-02	✱	●	30	32	37	95	60	180	M22×2	0,81	SPGT0904**	
ZTD03-310-XP32-SP09-02	✱	●	31	32	37	98	60	183	M22×2	0,831	SPGT0904**	
ZTD03-320-XP32-SP09-02	✱	●	32	32	37	101	60	186	M22×2	0,867	SPGT0904**	
ZTD03-330-XP32-SP09-02	✱	●	33	32	37	104	60	189	M22×2	0,928	SPGT0904**	
ZTD03-340-XP40-SP11-02	✱	●	34	40	47	107	70	207	(BSPT)RC1/4	1,33	SPGT1104**	
ZTD03-350-XP40-SP11-02	✱	●	35	40	47	110	70	210	(BSPT)RC1/4	1,371	SPGT1104**	
ZTD03-360-XP40-SP11-02	✱	●	36	40	47	113	70	213	(BSPT)RC1/4	1,414	SPGT1104**	
ZTD03-370-XP40-SP11-02	✱	●	37	40	47	116	70	216	(BSPT)RC1/4	1,448	SPGT1104**	
ZTD03-380-XP40-SP11-02	✱	●	38	40	47	119	70	219	(BSPT)RC1/4	1,498	SPGT1104**	
ZTD03-390-XP40-SP11-02	✱	●	39	40	47	122	70	222	(BSPT)RC1/4	1,554	SPGT1104**	
ZTD03-400-XP40-SP11-02	✱	●	40	40	47	125	70	225	(BSPT)RC1/4	1,667	SPGT1104**	
ZTD03-410-XP40-SP11-02	✱	●	41	40	47	128	70	228	(BSPT)RC1/4	1,653	SPGT1104**	
ZTD03-420-XP40-SP14-02	✱	●	42	40	52	131	70	241	(BSPT)RC1/4	1,903	SPGT1405**	
ZTD03-430-XP40-SP14-02	✱	●	43	40	52	134	70	244	(BSPT)RC1/4	1,951	SPGT1405**	
ZTD03-440-XP40-SP14-02	✱	●	44	40	52	137	70	247	(BSPT)RC1/4	2,039	SPGT1405**	

• In magazzino ○ Su richiesta

* Raffreddamento interno

Codice sistema > C9

Scelta gradi > C8

Informazioni tecniche > C201

Dati di taglio > C36

Articolo	*	Stock	Dimensioni [mm]								Inserto 
			ØD	ØD1	ØD2	L1	L2	L	d		
ZTD03-450-XP40-SP14-02	*	●	45	40	52	140	70	250	(BSPT)RC1/4	2,12	SPGT1405**
ZTD03-460-XP40-SP14-02	*	●	46	40	52	143	70	253	(BSPT)RC1/4	2,186	SPGT1405**
ZTD03-470-XP40-SP14-02	*	●	47	40	52	146	70	256	(BSPT)RC1/4	2,264	SPGT1405**
ZTD03-480-XP40-SP14-02	*	●	48	40	52	149	70	259	(BSPT)RC1/4	2,341	SPGT1405**
ZTD03-490-XP40-SP14-02	*	●	49	40	52	152	70	262	(BSPT)RC1/4	2,43	SPGT1405**
ZTD03-500-XP40-SP14-02	*	●	50	40	52	155	70	265	(BSPT)RC1/4	2,52	SPGT1405**
ZTD03-508-XP40-SP14-02	*	○	50,8	40	57	157	70	267	(BSPT)RC1/4	2,484	SPGT1405**
ZTD03-510-XP50-SP07-04	*	○	51	50	62	158	80	278	(BSPT)RC1/4	3,128	SPGT07T3**
ZTD03-530-XP50-SP07-04	*	○	53	50	62	164	80	284	(BSPT)RC1/4	3,426	SPGT07T3**
ZTD03-540-XP50-SP09-04	*	○	54	50	57	167	80	287	(BSPT)RC1/4	3,292	SPGT0904**
ZTD03-550-XP50-SP09-04	*	○	55	50	57	170	80	290	(BSPT)RC1/4	3,29	SPGT0904**
ZTD03-570-XP50-SP09-04	*	○	57	50	67	176	80	296	(BSPT)RC1/4	3,853	SPGT0904**
ZTD03-580-XP50-SP09-04	*	○	58	50	62	179	80	299	(BSPT)RC1/4	3,851	SPGT0904**
ZTD03-590-XP50-SP09-04	*	○	59	50	62	182	80	302	(BSPT)RC1/4	3,814	SPGT0904**
ZTD03-600-XP50-SP09-04	*	○	60	50	67	185	80	305	(BSPT)RC1/4	4,217	SPGT0904**
ZTD03-620-XP50-SP09-04	*	○	62	50	67	191	80	311	(BSPT)RC1/4	4,454	SPGT0904**
ZTD03-630-XP50-SP09-04	*	○	63	50	67	194	80	314	(BSPT)RC1/4	4,6	SPGT0904**
ZTD03-640-XP50-SP09-04	*	○	64	50	67	197	80	317	(BSPT)RC1/4	4,574	SPGT0904**
ZTD03-650-XP50-SP09-04	*	○	65	50	67	200	80	320	(BSPT)RC1/4	4,882	SPGT0904**
ZTD03-660-XP50-SP09-04	*	○	66	50	67	203	80	323	(BSPT)RC1/4	5,024	SPGT0904**
ZTD03-670-XP50-SP11-04	*	○	67	50	82	206	80	326	(BSPT)RC1/4	5,181	SPGT1104**
ZTD03-730-XP50-SP11-04	*	○	73	50	85	224	80	344	(BSPT)RC1/4	6,71	SPGT1104**

● In magazzino ○ Su richiesta

* Raffreddamento interno

Parti di ricambio							
	Inserto	SPGT0502**	SPGT0602**	SPGT07T3**	SPGT0904**	SPGT1104**	SPGT1405**
	Vita senza testa					M6x6 (7,0Nm)	M8x8 (10,2Nm)
	Vite	I60M2x4.3 (0,5Nm)	I60M2.2x5.5 (0,8Nm)	I60M2.5x6.5 (1,0Nm)	I60M3.5x8 (2,7Nm)	I60M4x10 (3,4Nm)	I60M5x13 (6,7Nm)
	Chiave	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

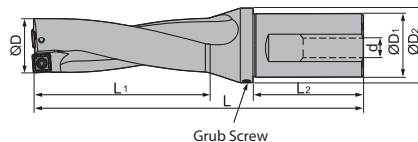
Inserto



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Punta ad inserti

ZTD04



Articolo	✱	Stock	Dimensioni [mm]									Inserto 
			ØD	ØD1	ØD2	L1	L2	L	d			
ZTD04-130-XP20-SP05-02	✱	○	13	20	25	57	50	124	M13×1	0,185	SPGT0502**	
ZTD04-140-XP20-SP05-02	✱	○	14	20	25	61	50	128	M13×1	0,195	SPGT0502**	
ZTD04-150-XP20-SP05-02	✱	○	15	20	25	65	50	132	M13×1	0,205	SPGT0502**	
ZTD04-160-XP20-SP05-02	✱	○	16	20	25	69	50	136	M13×1	0,216	SPGT0502**	
ZTD04-165-XP25-SP06-02	✱	○	16,5	25	32	71	56	137	M16×1,5	0,332	SPGT0602**	
ZTD04-170-XP25-SP06-02	✱	○	17	25	32	73	56	151	M16×1,5	0,333	SPGT0602**	
ZTD04-180-XP25-SP06-02	✱	○	18	25	32	77	56	155	M16×1,5	0,347	SPGT0602**	
ZTD04-190-XP25-SP06-02	✱	○	19	25	32	81	56	159	M16×1,5	0,362	SPGT0602**	
ZTD04-200-XP25-SP06-02	✱	○	20	25	32	85	56	163	M16×1,5	0,381	SPGT0602**	
ZTD04-210-XP25-SP06-02	✱	○	21	25	32	89	56	167	M16×1,5	0,4	SPGT0602**	
ZTD04-215-XP25-SP07-02	✱	○	21,5	25	32	91	56	165	M16×1,5	0,407	SPGT07T3**	
ZTD04-220-XP25-SP07-02	✱	○	22	25	32	93	56	171	M16×1,5	0,391	SPGT07T3**	
ZTD04-230-XP25-SP07-02	✱	○	23	25	32	97	56	175	M16×1,5	0,484	SPGT07T3**	
ZTD04-240-XP25-SP07-02	✱	○	24	25	32	101	56	179	M16×1,5	0,513	SPGT07T3**	
ZTD04-250-XP25-SP07-02	✱	○	25	25	32	105	56	183	M16×1,5	0,494	SPGT07T3**	
ZTD04-260-XP25-SP07-02	✱	○	26	25	32	109	56	187	M16×1,5	0,535	SPGT07T3**	
ZTD04-270-XP25-SP07-02	✱	○	27	25	32	113	56	191	M16×1,5	0,582	SPGT07T3**	
ZTD04-275-XP25-SP07-02	✱	○	27,5	25	32	115	56	192	M16×1,5	0,571	SPGT07T3**	
ZTD04-280-XP32-SP09-02	✱	○	28	32	37	117	60	202	M22×2	0,653	SPGT0904**	
ZTD04-290-XP32-SP09-02	✱	○	29	32	37	121	60	206	M22×2	0,846	SPGT0904**	
ZTD04-300-XP32-SP09-02	✱	○	30	32	37	125	60	210	M22×2	0,893	SPGT0904**	
ZTD04-310-XP32-SP09-02	✱	○	31	32	37	129	60	214	M22×2	0,914	SPGT0904**	
ZTD04-320-XP32-SP09-02	✱	○	32	32	37	133	60	218	M22×2	0,966	SPGT0904**	
ZTD04-330-XP32-SP09-02	✱	○	33	32	37	137	60	222	M22×2	1,016	SPGT0904**	
ZTD04-340-XP40-SP11-02	✱	○	34	40	47	141	70	241	(BSPT)RC1/4	1,46	SPGT1104**	
ZTD04-350-XP40-SP11-02	✱	○	35	40	47	145	70	245	(BSPT)RC1/4	1,52	SPGT1104**	
ZTD04-360-XP40-SP11-02	✱	○	36	40	47	149	70	249	(BSPT)RC1/4	1,579	SPGT1104**	
ZTD04-370-XP40-SP11-02	✱	○	37	40	47	153	70	253	(BSPT)RC1/4	1,592	SPGT1104**	
ZTD04-380-XP40-SP11-02	✱	○	38	40	47	157	70	257	(BSPT)RC1/4	1,801	SPGT1104**	
ZTD04-390-XP40-SP11-02	✱	○	39	40	47	161	70	261	(BSPT)RC1/4	1,801	SPGT1104**	
ZTD04-400-XP40-SP11-02	✱	○	40	40	47	165	70	265	(BSPT)RC1/4	1,874	SPGT1104**	
ZTD04-410-XP40-SP11-02	✱	○	41	40	47	169	70	269	(BSPT)RC1/4	1,861	SPGT1104**	
ZTD04-420-XP40-SP14-02	✱	○	42	40	52	173	70	283	(BSPT)RC1/4	2,168	SPGT1405**	

● In magazzino ○ Su richiesta

* Raffreddamento interno

Codice sistema > C9

Scelta gradi > C8

Informazioni tecniche > C201

Dati di taglio > C36

Articolo	*	Stock	Dimensioni [mm]								Inserto 
			ØD	ØD1	ØD2	L1	L2	L	d		
ZTD04-430-XP40-SP14-02	*	o	43	40	52	177	70	287	(BSPT)RC1/4	2,17	SPGT1405**
ZTD04-440-XP40-SP14-02	*	o	44	40	52	181	70	291	(BSPT)RC1/4	2,31	SPGT1405**
ZTD04-450-XP40-SP14-02	*	o	45	40	52	185	70	295	(BSPT)RC1/4	2,421	SPGT1405**
ZTD04-460-XP40-SP14-02	*	o	46	40	52	189	70	299	(BSPT)RC1/4	2,507	SPGT1405**
ZTD04-470-XP40-SP14-02	*	o	47	40	52	193	70	303	(BSPT)RC1/4	2,612	SPGT1405**
ZTD04-480-XP40-SP14-02	*	o	48	40	52	197	70	307	(BSPT)RC1/4	2,66	SPGT1405**
ZTD04-490-XP40-SP14-02	*	o	49	40	52	201	70	311	(BSPT)RC1/4	2,836	SPGT1405**
ZTD04-500-XP40-SP14-02	*	o	50	40	52	205	70	315	(BSPT)RC1/4	2,954	SPGT1405**
ZTD04-520-XP50-SP07-04	*	o	52	50	62	213	80	325	(BSPT)RC1/4	3,685	SPGT07T3**
ZTD04-530-XP50-SP07-04	*	o	53	50	62	217	80	329	(BSPT)RC1/4	3,777	SPGT07T3**
ZTD04-540-XP50-SP09-04	*	o	54	50	57	222	80	333	(BSPT)RC1/4	3,906	SPGT0904**
ZTD04-545-XP50-SP09-04	*	o	54,5	50	68	221	80	335	(BSPT)RC1/4	4,167	SPGT0904**
ZTD04-595-XP50-SP09-04	*	o	59,5	50	68	241	80	355	(BSPT)RC1/4	4,784	SPGT0904**

• In magazzino o Su richiesta

* Raffreddamento interno

Parti di ricambio							
	Inserto	SPGT0502**	SPGT0602**	SPGT07T3**	SPGT0904**	SPGT1104**	SPGT1405**
	Vita senza testa					M6x6 (7,0Nm)	M8x8 (10,2Nm)
	Vite	I60M2x4.3 (0,5Nm)	I60M2.2x5.5 (0,8Nm)	I60M2.5x6.5 (1,0Nm)	I60M3.5x8 (2,7Nm)	I60M4x10 (3,4Nm)	I60M5x13 (6,7Nm)
	Chiave	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

Inserto



C34

Codice sistema > C9

Scelta gradi > C8

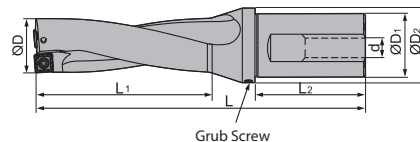
Informazioni tecniche > C201

Dati di taglio > C36



Punta ad inserti

ZTD05



Articolo	*	Stock	Dimensioni [mm]								Inserto
			ØD	ØD1	ØD2	L1	L2	L	d	kg	
ZTD05-170-XP25-SP06-02	*	o	17	25	32	90	56	168	M13x1	0,374	SPGT0602**
ZTD05-180-XP25-SP06-02	*	o	18	25	32	95	56	173	M13x1	0,394	SPGT0602**
ZTD05-190-XP25-SP06-02	*	o	19	25	32	100	56	178	M13x1	0,415	SPGT0602**
ZTD05-200-XP25-SP06-02	*	o	20	25	32	105	56	183	M13x1	0,44	SPGT0602**
ZTD05-210-XP25-SP06-02	*	o	21	25	32	110	56	188	M16x1,5	0,466	SPGT0602**
ZTD05-220-XP25-SP07-02	*	o	22	25	32	115	56	193	M16x1,5	0,476	SPGT07T3**
ZTD05-230-XP25-SP07-02	*	o	23	25	32	120	56	198	M16x1,5	0,507	SPGT07T3**
ZTD05-240-XP25-SP07-02	*	o	24	25	32	125	56	203	M16x1,5	0,542	SPGT07T3**
ZTD05-250-XP25-SP07-02	*	o	25	25	32	130	56	208	M16x1,5	0,561	SPGT07T3**
ZTD05-260-XP25-SP07-02	*	o	26	25	32	135	56	213	M16x1,5	0,613	SPGT07T3**
ZTD05-270-XP25-SP07-02	*	o	27	25	32	140	56	218	M16x1,5	0,665	SPGT07T3**
ZTD05-280-XP32-SP09-02	*	o	28	32	37	145	60	230	M16x1,5	0,891	SPGT0904**
ZTD05-290-XP32-SP09-02	*	o	29	32	37	150	60	235	M16x1,5	0,965	SPGT0904**
ZTD05-300-XP32-SP09-02	*	o	30	32	37	155	60	240	M16x1,5	0,959	SPGT0904**
ZTD05-310-XP32-SP09-02	*	o	31	32	37	160	60	245	M16x1,5	1,042	SPGT0904**
ZTD05-320-XP32-SP09-02	*	o	32	32	37	165	60	250	M22x2	1,11	SPGT0904**
ZTD05-330-XP32-SP09-02	*	o	33	32	37	170	60	255	M22x2	1,117	SPGT0904**
ZTD05-340-XP40-SP11-02	*	o	34	40	47	175	70	275	M22x2	1,57	SPGT1104**
ZTD05-350-XP40-SP11-02	*	o	35	40	47	180	70	280	M22x2	1,65	SPGT1104**
ZTD05-360-XP40-SP11-02	*	o	36	40	47	185	70	285	M22x2	1,712	SPGT1104**
ZTD05-370-XP40-SP11-02	*	o	37	40	47	190	70	290	M22x2	1,802	SPGT1104**
ZTD05-380-XP40-SP11-02	*	o	38	40	47	195	70	295	(BSPT)RC1/4	1,873	SPGT1104**
ZTD05-390-XP40-SP11-02	*	o	39	40	47	200	70	300	(BSPT)RC1/4	1,962	SPGT1104**
ZTD05-400-XP40-SP11-02	*	o	40	40	47	205	70	305	(BSPT)RC1/4	2,068	SPGT1104**
ZTD05-410-XP40-SP11-02	*	o	41	40	47	210	70	310	(BSPT)RC1/4	2,167	SPGT1104**
ZTD05-420-XP40-SP14-02	*	o	42	40	52	215	70	325	(BSPT)RC1/4	2,39	SPGT1405**
ZTD05-430-XP40-SP14-02	*	o	43	40	52	220	70	330	(BSPT)RC1/4	2,502	SPGT1405**
ZTD05-440-XP40-SP14-02	*	o	44	40	52	225	70	335	(BSPT)RC1/4	2,612	SPGT1405**
ZTD05-450-XP40-SP14-02	*	o	45	40	52	230	70	340	(BSPT)RC1/4	2,733	SPGT1405**
ZTD05-460-XP40-SP14-02	*	o	46	40	52	235	70	345	(BSPT)RC1/4	2,854	SPGT1405**
ZTD05-470-XP40-SP14-02	*	o	47	40	52	240	70	350	(BSPT)RC1/4	2,894	SPGT1405**
ZTD05-480-XP40-SP14-02	*	o	48	40	52	245	70	355	(BSPT)RC1/4	3,109	SPGT1405**
ZTD05-490-XP40-SP14-02	*	o	49	40	52	250	70	360	(BSPT)RC1/4	3,271	SPGT1405**
ZTD05-500-XP40-SP14-02	*	o	50	40	52	255	70	365	(BSPT)RC1/4	3,425	SPGT1405**

• In magazzino o Su richiesta

* Raffreddamento interno

Codice sistema > C9

Scelta gradi > C8

Informazioni tecniche > C201

Dati di taglio > C36

A

Tornitura

Parti di ricambio						
	Inserto	SPGT0602**	SPGT07T3**	SPGT0904**	SPGT1104**	SPGT1405**
	Vita senza testa				M6×6 (7,0Nm)	M8×8 (10,2Nm)
	Vite	I60M2.2×5.5 (0,8Nm)	I60M2.5×6.5 (1,0Nm)	I60M3.5×8 (2,7Nm)	I60M4×10 (3,4Nm)	I60M5×13 (6,7Nm)
	Chiave	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

Inserto



C34

B

Fresatura

C

Foratura

DInformazioni
tecniche**E**

Indice

Codice sistema > C9

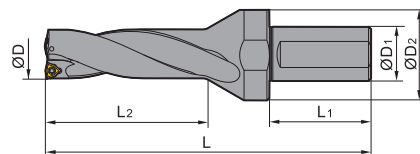
Scelta gradi > C8

Informazioni tecniche > C201

Dati di taglio > C36

Punta ad inserti

ZD03



Articolo	*	Stock	Dimensioni [mm]							Inserto
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZD03-160-XP25-WC03-02	*	•	16	25	32	56	52	129	0,33	WCMX0302**
ZD03-170-XP25-WC03-02	*	•	17	25	32	56	55	133	0,33	WCMX0302**
ZD03-180-XP25-WC03-02	*	•	18	25	32	56	58	137	0,35	WCMX0302**
ZD03-190-XP25-WC03-02	*	•	19	25	32	56	61	140	0,36	WCMX0302**
ZD03-200-XP25-WC03-02	*	•	20	25	32	56	64	143	0,37	WCMX0302**
ZD03-210-XP25-WC04-02	*	•	21	25	45	56	67	153	0,51	WCMX0402**
ZD03-220-XP25-WC04-02	*	•	22	25	45	56	70	156	0,54	WCMX0402**
ZD03-230-XP25-WC04-02	*	•	23	25	45	56	73	159	0,55	WCMX0402**
ZD03-240-XP25-WC04-02	*	•	24	25	45	56	76	162	0,57	WCMX0402**
ZD03-250-XP25-WC04-02	*	•	25	25	45	56	79	165	0,6	WCMX0402**
ZD03-260-XP32-WC05-02	*	•	26	32	55	60	83	176	0,93	WCMX0503**
ZD03-270-XP32-WC05-02	*	•	27	32	55	60	86	180	0,97	WCMX0503**
ZD03-280-XP32-WC05-02	*	•	28	32	55	60	89	184	1,01	WCMX0503**
ZD03-290-XP32-WC05-02	*	•	29	32	55	60	92	188	1,05	WCMX0503**
ZD03-300-XP32-WC05-02	*	•	30	32	55	60	95	192	1,08	WCMX0503**
ZD03-310-XP40-WC06-02	*	•	31	40	60	70	98	203	1,44	WCMX06T3**
ZD03-320-XP40-WC06-02	*	•	32	40	60	70	101	206	1,48	WCMX06T3**
ZD03-330-XP40-WC06-02	*	•	33	40	60	70	104	209	1,52	WCMX06T3**
ZD03-340-XP40-WC06-02	*	•	34	40	60	70	107	212	1,55	WCMX06T3**
ZD03-350-XP40-WC06-02	*	•	35	40	60	70	110	215	1,61	WCMX06T3**
ZD03-360-XP40-WC06-02	*	•	36	40	60	70	113	218	1,66	WCMX06T3**
ZD03-370-XP40-WC06-02	*	•	37	40	60	70	116	221	1,71	WCMX06T3**
ZD03-380-XP40-WC06-02	*	•	38	40	60	70	119	225	1,76	WCMX06T3**
ZD03-390-XP40-WC06-02	*	•	39	40	60	70	122	228	1,82	WCMX06T3**
ZD03-400-XP40-WC06-02	*	•	40	40	60	70	125	231	1,93	WCMX06T3**
ZD03-410-XP40-WC06-02	*	•	41	40	60	70	128	234	1,94	WCMX06T3**
ZD03-420-XP40-WC08-02	*	•	42	40	60	70	131	239	2,18	WCMX0804**
ZD03-430-XP40-WC08-02	*	•	43	40	60	70	134	242	2,245	WCMX0804**
ZD03-440-XP40-WC08-02	*	•	44	40	60	70	137	245	2,34	WCMX0804**
ZD03-450-XP40-WC08-02	*	•	45	40	60	70	140	248	2,34	WCMX0804**
ZD03-460-XP40-WC08-02	*	•	46	40	60	70	143	251	2,49	WCMX0804**
ZD03-470-XP40-WC08-02	*	•	47	40	60	70	146	253	2,88	WCMX0804**
ZD03-480-XP40-WC08-02	*	•	48	40	70	70	149	255	2,55	WCMX0804**

• In magazzino ○ Su richiesta

* Raffreddamento interno

Codice sistema > C9

Scelta gradi > C8

Informazioni tecniche > C201

Dati di taglio > C36

Articolo	*	Stock	Dimensioni [mm]							Inserto
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZD03-490-XP40-WC08-02	*	○	49	40	70	70	152	257	2,619	WCMX0804**
ZD03-500-XP40-WC08-02	*	●	50	40	70	70	155	259	2,62	WCMX0804**
ZD03-510-XP40-WC08-02	*	○	51	40	70	70	158	261	2,62	WCMX0804**
ZD03-520-XP40-WC08-02	*	○	52	40	70	70	70	263	2,808	WCMX0804**
ZD03-530-XP40-WC08-02	*	○	53	40	70	70	164	265	2,906	WCMX0804**
ZD03-540-XP40-WC08-02	*	●	54	40	70	70	167	267	2,983	WCMX0804**
ZD03-550-XP40-WC08-02	*	○	55	40	70	70	170	269	3,126	WCMX0804**
ZD03-560-XP40-WC08-02	*	○	56	40	70	70	173	271	3,157	WCMX0804**
ZD03-580-XP40-WC08-02	*	●	58	40	70	70	179	275	3,501	WCMX0804**

● In magazzino ○ Su richiesta

* Raffreddamento interno

Parti di ricambio						
	Inserto	WCMX0302**	WCMX0402**	WCMX0503**	WCMX06T3**	WCMX0804**
	Vite	I60M2.5×6.5 (1,0Nm)	I60M2.5×6.5T (1,0Nm)	I60M3×7 (1,8Nm)	I60M3×7 (1,8Nm)	I60M3.5×10.4 (2,7Nm)
	Chiave	WT06IP	WT07IP	WT15IP	WT15IP	WT20IP

Inserto



Media Lavor.

C35

A

Tornitura

B

Fresatura

C

Foratura

D

Informazioni
tecniche

E

Indice

W C M X 08 04 12 R – PG

1

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3

4

5

6

7

8

9

Forma dell'inserto



S



1

Angolo di spoglia inferiore

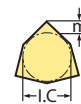


P



2

Grado di tolleranza



Code	I.C [mm]	m [mm]	S [mm]
G	±0,025	±0,025	±0,130
M	±0,05-0,13	±0,08-0,18	±0,130

3

Caratteristiche di fissaggio (metrico)

Forma dell'inserto



T

X Speciale

4

Lunghezza tagliente [mm]

Forma dell'inserto



S

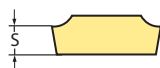


W

I.C [mm]	S	W
3,8		03
4,3		04
5,4		05
6,35	06	
6,5		06
8,0		08
8,7	08	
9,252	09	
12,7	12	

5

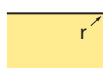
Spessore dell'inserto S [mm]



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

6

Raggio di punta r [mm]



Code	r
04	0,4
08	0,8
12	1,2

7

Direzione di taglio

Code	Descrizione
R	Destra
L	Sinistra

8

Panoramica rompitrucioli (da p. C3)

9

SPMX	L	I.C	S	d
04 02	4	4	2,38	2,2
05 02	5	5	2,38	2,2
06 02	6	6	2,38	2,5
07 T3	7,94	7,94	3,97	2,8
09 04	9,8	9,8	4,3	4,1
11 04	11,5	11,5	4,76	4,4
14 05	14,3	14,3	5,2	5,5

Inserti - Foratura

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

SP** Inserti - Fresatura		HC ¹ (CVD)		HC ¹ (PVD)		HW	
	P						
	M						
	K						
	N						
	S						
	H						
ISO		r	YB6338 YBD252	YBG105 YBG202 YBS203 YBG205 YB9320 YBG212		YD201	
	SPMX040203-EM	0,3	●		●		
	SPMX050204-EM	0,4	●		●		
	SPMX060204-EM	0,4	●		●		
	SPMX07T308-EM	0,8	●		●		
	SPMX090408-EM	0,8	●		●		
	SPMX110408-EM	0,8	●		●		
	SPMX140512-EM	1,2	●		●		
	SPMX040203-LM	0,3			○		
	SPMX050204-LM	0,4			○		
	SPMX060204-LM	0,4			○		
	SPMX07T308-LM	0,8			○		
	SPMX090408-LM	0,8			○		
	SPMX110408-LM	0,8			○		
	SPMX140512-LM	1,2			○		
	SPMX040203-XM	0,3			○		
	SPMX050204-XM	0,4			●		
	SPMX060204-XM	0,4		●	●		
	SPMX07T308-XM	0,8		●	● ○		
	SPMX090408-XM	0,8			●		
	SPMX110408-XM	0,8			●		
	SPMX140512-XM	1,2			●		

● In magazzino ○ Su richiesta

HC¹ Carburo cementato rivestito
HW Carburo cementato non rivestito

Portautensile			
ZSD02	ZSD03	ZSD04	ZSD05
C10	C13	C16	C19

Codice sistema > C32

Scelta gradi > C8

Informazioni tecniche > C201

Dati di taglio > C36

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Indice

SPGT	L	I.C	S	d
05 02	5	5	2,38	2,2
06 02	6	6	2,38	2,6
07 T3	7,94	7,94	3,97	2,8
09 04	9,8	9,8	4,76	4,2
11 04	11,5	11,5	4,76	4,4
14 05	14,3	14,3	5,2	5,75

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

Inserti - Foratura

SP ** Inserti - Foratura		HC ¹ (CVD)		HC ¹ (PVD)						HW	
	P										
	M										
	K										
	N										
	S										
	H										
ISO		r	YB6338 YBD252		YBG105 YBG202 YBS203 YBG205 YB9320 YBG212					YD201	
PM	SPGT050204-PM	0,4									
	SPGT060204-PM	0,4									
	SPGT07T308-PM	0,8									
	SPGT090408-PM	0,8									
	SPGT110408-PM	0,8									
	SPGT140512-PM	1,2									
EM	SPGT050204-EM	0,4									
	SPGT060204-EM	0,4									
	SPGT07T308-EM	0,8									
	SPGT090408-EM	0,8									
	SPGT110408-EM	0,8									
	SPGT140512-EM	1,2									

● In magazzino ○ Su richiesta

HC¹ Carburo cementato rivestito
HW Carburo cementato non rivestito

D

Informazioni tecniche

Portautensile			
ZTD02	ZTD03	ZTD04	ZTD05
C22	C24	C26	C28

Codice sistema > C32

Scelta gradi > C8

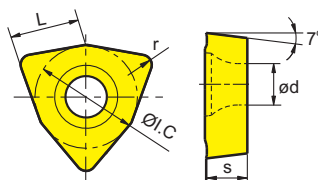
Informazioni tecniche > C201

Dati di taglio > C36

WCMX	L	I.C	S	d
03 02	3,8	5,56	2,38	2,8
04 02	4,3	6,35	2,38	3,1
05 03	5,4	7,94	3,18	3,2
06 T3	6,5	9,525	3,97	3,7
08 04	8,7	12,7	4,76	4,3

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

Inserti - Foratura

WC ** Inserti - Foratura			HC ¹ (CVD)		HC ¹ (PVD)		HW	
	P							
	M							
	K							
	N							
	S							
	H							
ISO		r	YB6338 YBD252		YBG105 YBG202 YBS203 YBG205 YB9320 YBG212		YD201	
53 	WCMX030208R-53	0,8	●		○			
	WCMX040208R-53	0,8	●		○			
	WCMX050308R-53	0,8	●		○			
	WCMX06T308R-53	0,8	●		○		○	
	WCMX080412R-53	1,2	●		○			
D 	WCMX06T308-D	0,8	○					
	WCMX080412-D	1,2	●					
PG 	WCMX030208R-PG	0,8			○			
	WCMX040208R-PG	0,8			○			
	WCMX050308R-PG	0,8	○		○	○		
	WCMX06T308R-PG	0,8			○			
	WCMX080412R-PG	1,2			○			

● In magazzino ○ Su richiesta

HC¹ Carburo cementato rivestito
HW Carburo cementato non rivestito

Portautensile

ZD03



C30

Codice sistema > C32

Scelta gradi > C8

Informazioni tecniche > C201

Dati di taglio > C36



Punta ad inserti

Gruppo materiali		Composizione/Struttura/Trattamento termico		HB	Gruppo di sgrassatura	ZSD*		ZSD*		
						SPMX04		SPMX05/06		
						v _c [m/min]	f [mm]	v _c [m/min]	f [mm]	
P	Acciaio non legato	ca. 0,15 % C	Temprato	125	1	200-300	0,05-0,08	200-300	0,05-0,10	
		ca. 0,45 % C	Temprato	190	2	200-300	0,05-0,08	200-300	0,05-0,10	
		ca. 0,45 % C	pre-temprato	250	3	200-300	0,05-0,08	200-300	0,05-0,10	
		ca. 0,75 % C	Temprato	270	4	200-300	0,05-0,08	200-300	0,05-0,10	
		ca. 0,75 % C	pre-temprato	300	5	200-300	0,05-0,08	200-300	0,05-0,10	
	Acciaio al carbonio		Temprato	180	6	140-220	0,05-0,08	140-220	0,05-0,10	
			pre-temprato	275	7	140-220	0,05-0,08	140-220	0,05-0,10	
			pre-temprato	300	8	140-220	0,05-0,08	140-220	0,05-0,10	
			pre-temprato	350	9	140-220	0,05-0,08	140-220	0,05-0,10	
	Acciaio alto legato e acciaio alto legato per utensili		Temprato	200	10	120-180	0,05-0,08	120-180	0,05-0,10	
		temprato e rinvenuto	325	11	120-180	0,05-0,08	120-180	0,05-0,10		
M	Acciaio inossidabile	ferritico/martensitico	Temprato	200	12	110-230	0,05-0,08	110-230	0,05-0,10	
		martensitico	pre-temprato	240	13	110-230	0,05-0,08	110-230	0,05-0,10	
		austenitico	quencing	180	14	110-230	0,05-0,08	110-230	0,05-0,10	
		austenitico-ferritico		230	15	110-230	0,05-0,08	110-230	0,05-0,10	
K	Ghisa grigia	perlitico/ferritico		180	16	170-240	0,05-0,08	170-240	0,05-0,10	
		perlitico (martensitico)		260	17	170-240	0,05-0,08	170-240	0,05-0,10	
	Ghisa sferoidale	ferritico		160	18	130-200	0,05-0,08	130-200	0,05-0,10	
		perlitico		250	19	130-200	0,05-0,08	130-200	0,05-0,10	
	Ghisa malleabile	ferritico		130	20	120-220	0,05-0,08	120-220	0,05-0,10	
		perlitico		230	21	120-220	0,05-0,08	120-220	0,05-0,10	
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	Temprato	200	30					
			indurito	280	31					
		Base Ni o Co	Temprato	250	32					
			indurito	350	33					
			fuso	320	34					
	Leghe di titanio	Titanio puro		R _m 400	35					
Leghe Alpha + Beta		indurito	R _m 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.

Per profondità di foratura di 5xD, i dati di taglio devono essere adattati al corrispondente campo di applicazione.

Esempi di materiali per gruppi di taglio sono disponibili a pagina D11.

Indice