

NPN

New Product News



MAXIRUSH

INDEXABLE SOLID HEADS

Ampliamento linea MAXI-RUSH



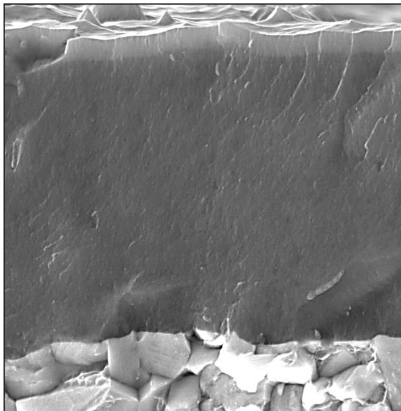
KEY POINT

TaeguTec ha ampliato la linea MAXI-RUSH.

TaeguTec ha ampliato la linea MAXI-RUSH, frese intercambiabili in metallo duro

La linea di prodotti MAXI-RUSH, nota per i tempi di setup ridotti grazie alla facile sostituzione della testina intercambiabile con elevata rigidità, consente un'eccellente precisione di lavorazione. Con l'ampliamento della linea MAXI-RUSH, i clienti hanno ora un' ampia gamma tra cui scegliere.

new Caratteristiche grado TT5513



- Substrato ultrafine con ottime caratteristiche di tenacità ed eccellente resistenza all'abrasione
- Strato nanocristallino AlTiN
- Rivestito in PVD, antiabrasivo e resistente ai colpi
- Adatto per acciai per stampi e acciai pretemprati

MAXIRUSH Testine



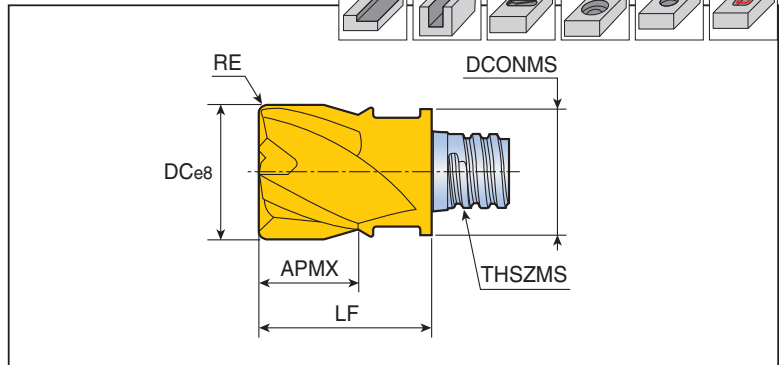
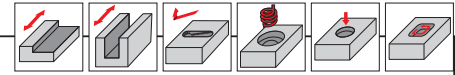
MAXIRUSH Steli e adattatori





MXEE(D)-04

Fresa piana e torica 4 taglienti per lavorazione generica



Descrizione	Avanz. (mm/z)	Dimensioni (mm)								Grado TT5523
		DC	RE	FHA	APMX	LF	THSZMS	DCONMS		
MXEE 050L04R05-04S04 new	0.02-0.06	5	0.5	45	4	8.5	S04	6.0	●	
MXEE 050L07R00-04S05 new	0.02-0.06	5	-	45	7	15.0	S05	8.0	●	
MXEE 060L04R05-04S04 new	0.02-0.04	6	0.5	45	4	8.5	S04	5.8	●	
MXEE 060L05R00-04S05	0.03-0.04	6	-	45	5	10.0	S05	8.0	●	
MXED 080L05R05-04S05	0.03-0.09	8	0.5	30	5	10.0	S05	7.7	●	
MXED 080L05R10-04S05	0.03-0.09	8	1.0	30	5	10.0	S05	7.7	●	
MXED 080L05R15-04S05	0.03-0.09	8	1.5	30	5	10.0	S05	7.7	●	
MXED 080L09R05-04S05	0.03-0.09	8	0.5	30	9	15.0	S05	7.7	●	
MXEE 080L05R00-04S05 new	0.03-0.09	8	-	45	5	10.0	S05	7.7	●	
MXEE 080L05R05-04S05 new	0.03-0.09	8	0.5	45	5	10.0	S05	7.7	●	
MXEE 080L05R10-04S05 new	0.03-0.09	8	1.0	45	5	10.0	S05	7.7	●	
MXEE 080L09R00-04S05 new	0.03-0.09	8	-	45	9	15.0	S05	7.7	●	
MXED 100L07R05-04S06	0.03-0.10	10	0.5	30	7	13.0	S06	9.6	●	
MXED 100L07R10-04S06	0.03-0.10	10	1.0	30	7	13.0	S06	9.6	●	
MXEE 100L07R00-04S06	0.03-0.10	10	-	45	7	13.0	S06	9.6	●	
MXEE 100L07R05-04S06	0.03-0.10	10	0.5	45	7	13.0	S06	9.6	●	
MXEE 100L07R10-04S06	0.03-0.10	10	1.0	45	7	13.0	S06	9.6	●	
MXEE 100L12R00-04S06 new	0.03-0.10	10	-	45	12	19.0	S06	9.6	●	
MXED 120L09R05-04S08	0.04-0.11	12	0.5	30	9	16.5	S08	11.7	●	
MXED 120L09R10-04S08	0.04-0.11	12	1.0	30	9	16.5	S08	11.7	●	
MXEE 120L09R00-04S08	0.04-0.11	12	-	45	9	16.5	S08	11.7	●	
MXEE 120L09R05-04S08	0.04-0.11	12	0.5	45	9	16.5	S08	11.7	●	
MXEE 120L09R10-04S08	0.04-0.11	12	1.0	45	9	16.5	S08	11.7	●	
MXEE 120L14R00-04S08 new	0.04-0.11	12	-	45	14	23.0	S08	11.7	●	
MXED 160L12R05-04S10	0.05-0.13	16	0.5	30	12	20.5	S10	15.3	●	
MXED 160L12R10-04S10	0.05-0.13	16	1.0	30	12	20.5	S10	15.3	●	
MXED 160L12R15-04S10	0.05-0.13	16	1.5	30	12	20.5	S10	15.3	●	
MXED 160L12R20-04S10	0.05-0.13	16	2.0	30	12	20.5	S10	15.3	●	
MXED 160L12R30-04S10 new	0.05-0.13	16	3.0	30	12	20.5	S10	15.3	●	
MXED 160L12R40-04S10 new	0.05-0.13	16	4.0	30	12	20.5	S10	15.3	●	
MXEE 160L12R00-04S10	0.05-0.13	16	-	45	12	20.5	S10	15.3	●	
MXEE 160L12R05-04S10	0.05-0.13	16	0.5	45	12	20.5	S10	15.3	●	
MXEE 160L12R10-04S10	0.05-0.13	16	1.0	45	12	20.5	S10	15.3	●	
MXEE 160L12R15-04S10	0.05-0.13	16	1.5	45	12	20.5	S10	15.3	●	
MXEE 160L12R20-04S10	0.05-0.13	16	2.0	45	12	20.5	S10	15.3	●	

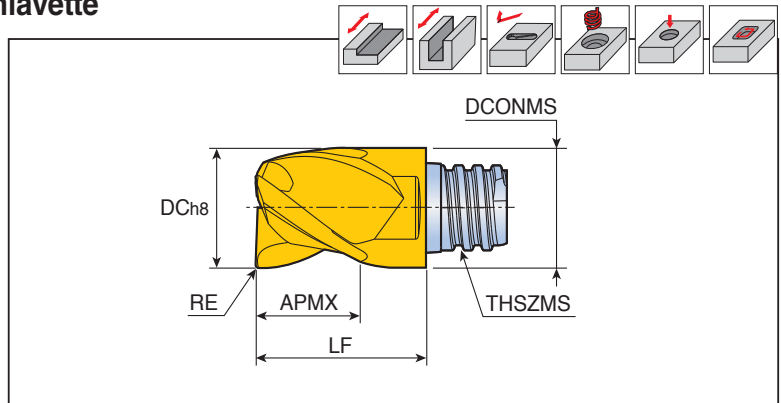
► La chiave deve essere ordinata separatamente
► FHA: Angolo d'elica

●: Standard



MXEE-03

Fresa torica 3 taglienti per sgrossatura chiavette



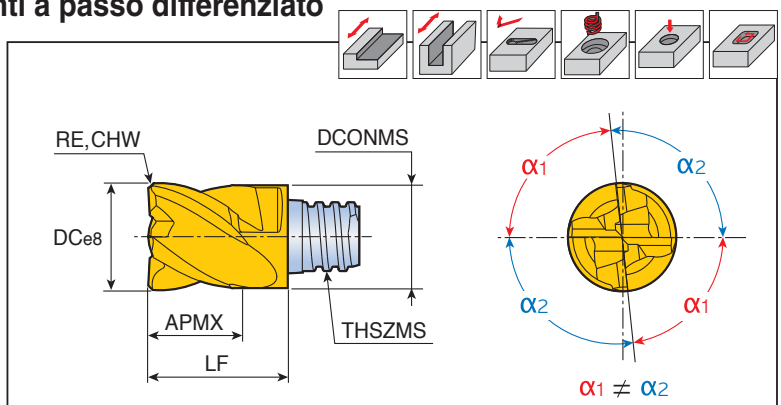
Descrizione	Avanz. (mm/z)	Dimensioni (mm)						Grado
		DC	RE	APMX	LF	THSZMS	DCONMS	
MXEE 077L04R02-03S05	0.03-0.08	7.7	0.2	4	10.0	S05	7.7	●
097L05R03-03S06	0.03-0.09	9.7	0.3	5	13.0	S06	9.7	●
117L07R03-03S08	0.03-0.10	11.7	0.3	7	16.5	S08	11.7	●
157L08R03-03S10	0.04-0.12	15.7	0.3	8	20.5	S10	15.3	●
197L12R04-03S12	0.05-0.13	19.7	0.4	12	25.5	S12	18.3	●

► La chiave deve essere ordinata separatamente

●: Standard

MXEE-I04

Fresa piana con smusso e torica 4 taglienti a passo differenziato



Descrizione	Avanz. (mm/z)	Dimensioni (mm)							Grado
		DC	RE	CHW	APMX	LF	THSZMS	DCONMS	
MXEE 080L05C30I04S05	0.03-0.09	8	-	0.3	5	10.0	S05	7.7	●
100L07C40I04S06	0.03-0.10	10	-	0.4	7	13.0	S06	9.7	●
120L09C50I04S08	0.04-0.11	12	-	0.5	9	16.5	S08	11.7	●
160L12C60I04S10	0.05-0.13	16	-	0.6	12	20.5	S10	15.3	●
200L15C60I04S12	0.05-0.17	20	-	0.6	15	25.5	S12	18.3	●
250L22C60I04S15	0.06-0.17	25	-	0.6	22	37.0	S15	23.9	●
250L22R00I04S15	0.06-0.17	25	-	-	22	37.0	S15	23.9	●
250L22R05I04S15	0.06-0.17	25	0.5	-	22	37.0	S15	23.9	●
250L22R10I04S15	0.06-0.17	25	1.0	-	22	37.0	S15	23.9	●
250L22R20I04S15	0.06-0.17	25	2.0	-	22	37.0	S15	23.9	●
250L22R30I04S15	0.06-0.17	25	3.0	-	22	37.0	S15	23.9	●

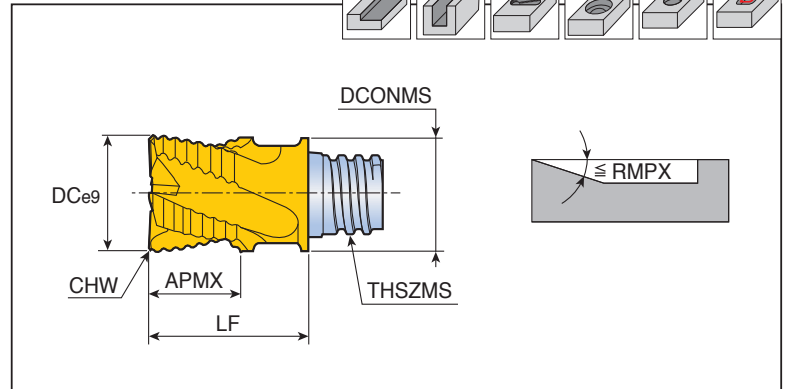
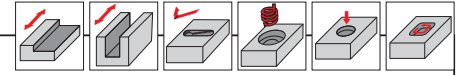
► La chiave deve essere ordinata separatamente

●: Standard



MXEE-R

Fresa piana con smusso 4-6 taglienti per sgrossatura



Descrizione	Avanz. (mm/z)	Dimensioni (mm)								Grado TT5523
		DC	NOF	CHW	APMX	LF	THSZMS	DCONMS	RMPX	
MXEE 080L05C25R04S05	0.03-0.08	8	4	0.25	5	10.0	S05	7.7	5	●
100L07C30R04S06	0.03-0.09	10	4	0.30	7	13.0	S06	9.7	5	●
120L09C35R04S08	0.04-0.10	12	4	0.35	9	16.5	S08	11.7	5	●
160L12C40R05S10	0.04-0.10	16	5	0.40	12	20.5	S10	15.3	5	●
200L15C40R06S12	0.05-0.11	20	6	0.40	15	25.5	S12	18.3	3	●
250L22C50R06S15	0.05-0.11	25	6	0.50	22	37.0	S15	23.9	3	●

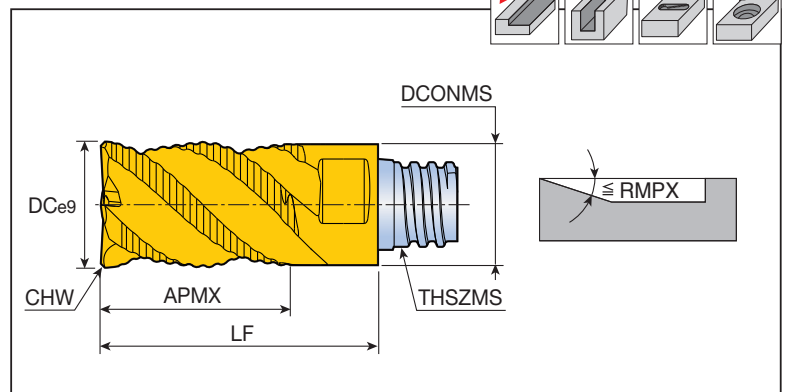
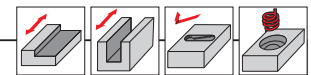
- ▶ La chiave deve essere ordinata separatamente
- ▶ NOF: Numero di taglienti
- ▶ RMPX: Massimo angolo di rampa

●: Standard

MXEE-R-1.5D new



Fresa piana con smusso 4-6 taglienti per sgrossatura, tagliente 1.5xD



Descrizione	Avanz. (mm/z)	Dimensioni (mm)								Grado TT5523
		DC	NOF	CHW	APMX	LF	THSZMS	DCONMS	RMPX	
MXEE 080L12C25R04S05	0.03-0.08	8	4	0.25	12	18.0	S05	7.7	5	●
100L15C30R04S06	0.03-0.09	10	4	0.30	15	22.0	S06	9.6	5	●
120L18C35R04S08	0.04-0.10	12	4	0.35	18	27.0	S08	11.7	5	●
160L24C40R05S10	0.04-0.10	16	5	0.40	24	33.5	S10	15.3	5	●
200L30C40R06S12	0.05-0.11	20	6	0.40	30	41.0	S12	18.5	3	●

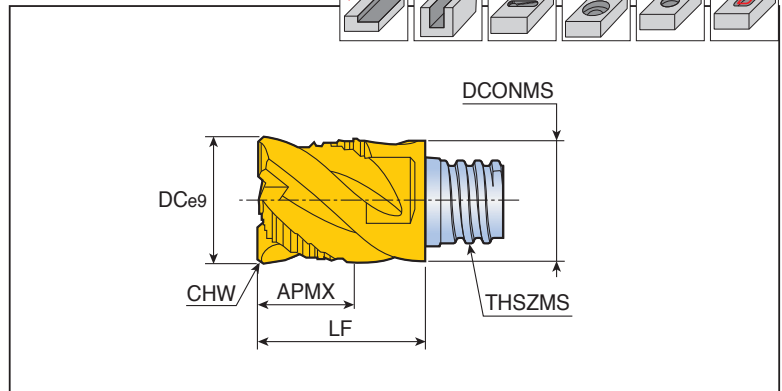
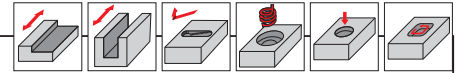
- ▶ La chiave deve essere ordinata separatamente
- ▶ NOF: Numero di taglienti
- ▶ RMPX: Massimo angolo di rampa

●: Standard



MXEE-C04

Fresa piana con smusso 4 taglienti, 2 di sgrossatura 2 di finitura



Descrizione	Avanz. (mm/z)	Dimensioni (mm)						Grado	
		DC	CHW	APMX	LF	THSZMS	DCONMS	TT5523	
MXEE 080L05C30C04S05	0.03-0.08	8	0.3	5	10.0	S05	7.7	●	
100L07C30C04S06	0.03-0.09	10	0.3	7	13.0	S06	9.7	●	
120L09C40C04S08	0.04-0.10	12	0.4	9	16.5	S08	11.7	●	
160L12C60C04S10	0.05-0.11	16	0.6	12	20.5	S10	15.3	●	
200L15C60C04S12	0.05-0.11	20	0.6	15	25.5	S12	18.3	●	
250L22C60C04S15	0.05-0.11	25	0.6	22	37.0	S15	23.9	●	

► La chiave deve essere ordinata separatamente

●: Standard

MXEE-A02

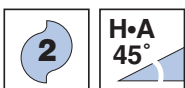
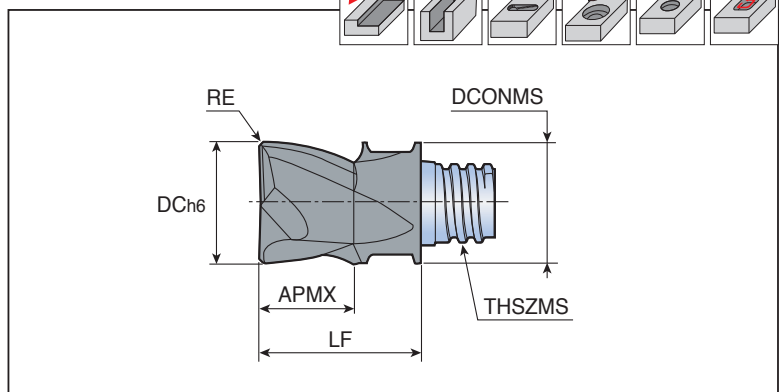
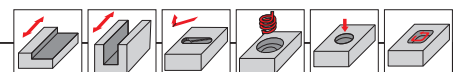
Fresa torica 2 taglienti per lavorazione alluminio



UF10



TTA101



Descrizione	Avanz. (mm/z)	Dimensioni (mm)						Grado	
		DC	RE	APMX	LF	THSZMS	DCONMS	UF10	TTA101
MXEE 100L07R05A02S06	0.03-0.10	10	0.5	7	13.0	S06	9.7	●	●
100L07R10A02S06	0.03-0.10	10	1.0	7	13.0	S06	9.7	●	●
120L09R05A02S08	0.04-0.11	12	0.5	9	16.5	S08	11.7	●	●

► La chiave deve essere ordinata separatamente

●: Standard



MXEE-A03

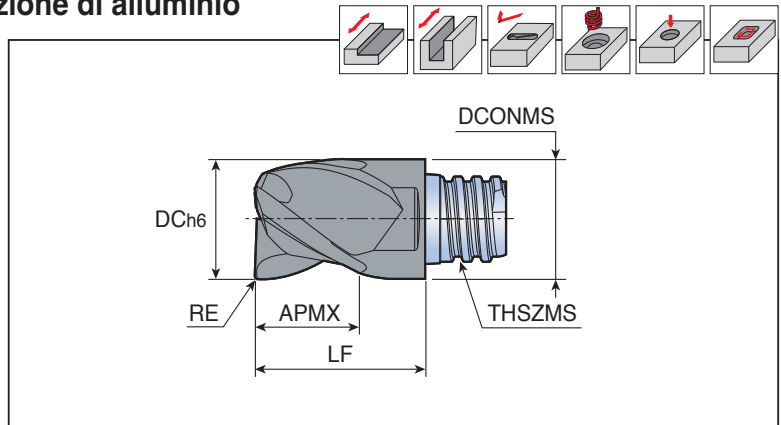
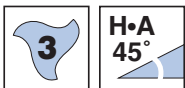
Fresa piana e torica 3 taglienti per lavorazione di alluminio



UF10



TTA101



Descrizione	Avanz. (mm/z)	Dimensioni (mm)						Grado	
		DC	RE	APMX	LF	THSZMS	DCONMS	UF10	TTA101
MXEE 080L05R05A03S05	0.03-0.09	8	0.5	5	10.0	S05	7.7	●	●
100L06R05A03S06	0.03-0.10	10	0.5	6	13.0	S06	9.7	●	●
100L06R10A03S06	0.03-0.10	10	1.0	6	13.0	S06	9.7	●	●
120L08R05A03S08	0.04-0.11	12	0.5	8	16.5	S08	11.7	●	●
120L08R10A03S08	0.04-0.11	12	1.0	8	16.5	S08	11.7	●	●
160L10R00A03S10	0.05-0.13	16	-	10	20.5	S10	15.3	●	●
160L10R10A03S10	0.05-0.13	16	1.0	10	20.5	S10	15.3	●	●
160L10R20A03S10	0.05-0.13	16	2.0	10	20.5	S10	15.3	●	●
200L12R05A03S12	0.05-0.13	20	0.5	12	25.5	S12	18.3	●	●
200L12R10A03S12	0.05-0.13	20	1.0	12	25.5	S12	18.3	●	●
200L12R20A03S12	0.05-0.13	20	2.0	12	25.5	S12	18.3	●	●

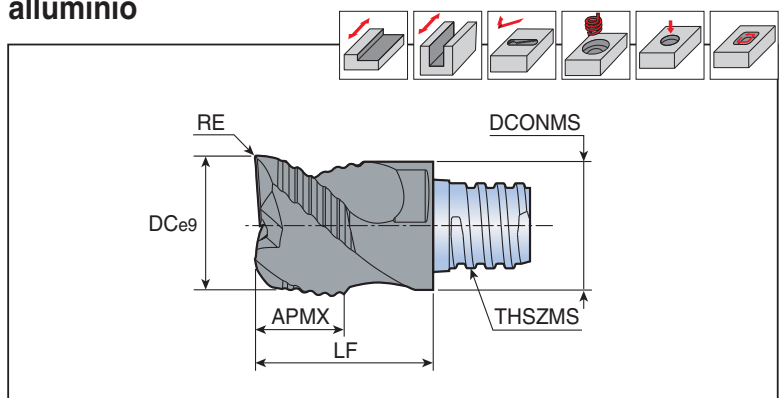
► La chiave deve essere ordinata separatamente

●: Standard

MXEE-RA03 new



Fresa torica 3 taglienti per sgrossatura di alluminio



Descrizione	Avanz. (mm/z)	Dimensioni (mm)						Grado
		DC	RE	APMX	LF	THSZMS	DCONMS	UF10
MXEE 080L05R02RA03S05	0.03-0.15	8	0.2	5	10.0	S05	7.7	●
100L06R02RA03S06	0.05-0.20	10	0.2	6	13.0	S06	9.6	●
120L08R02RA03S08	0.07-0.22	12	0.2	8	16.5	S08	11.7	●
160L10R02RA03S10	0.07-0.25	16	0.2	10	20.5	S10	15.3	●
200L12R02RA03S12	0.07-0.25	20	0.2	12	25.5	S12	18.5	●

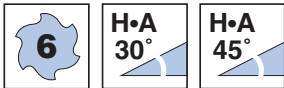
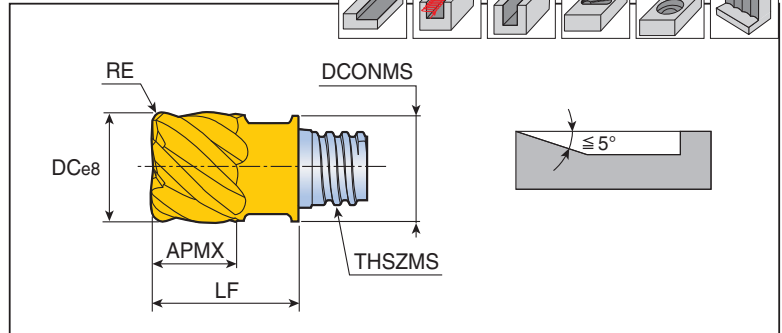
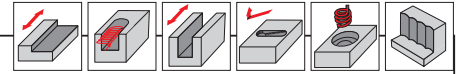
► La chiave deve essere ordinata separatamente

●: Standard



MXEE(D)-06

Fresa piana e torica 6 taglienti per materiali difficili senza taglio al centro



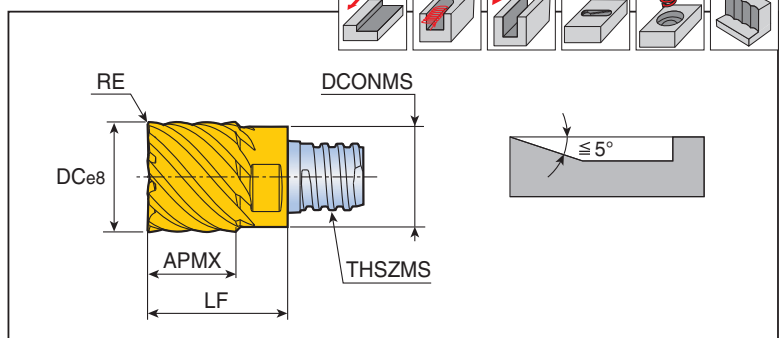
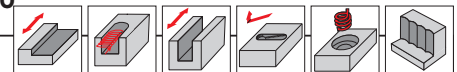
Descrizione	Avanz. (mm/z)	Dimensioni (mm)							Grado TT5523
		DC	RE	FHA	APMX	LF	THSZMS	DCONMS	
MXEE 080L05R05-06S05	0.03-0.10	8	0.5	45	5	10.0	S05	7.7	●
MXEE 080L05R10-06S05	0.03-0.10	8	1.0	45	5	10.0	S05	7.7	●
MXED 100L07R05-06S06	0.03-0.10	10	0.5	30	7	13.0	S06	9.7	●
MXED 100L07R10-06S06	0.03-0.10	10	1.0	30	7	13.0	S06	9.7	●
MXEE 100L07R05-06S06	0.04-0.10	10	0.5	45	7	13.0	S06	9.7	●
MXEE 100L07R10-06S06	0.04-0.10	10	1.0	45	7	13.0	S06	9.7	●
MXEE 100L07R15-06S06	0.03-0.10	10	1.5	45	7	13.0	S06	9.7	●
MXED 120L09R05-06S08	0.04-0.11	12	0.5	30	9	16.5	S08	11.7	●
MXEE 120L09R00-06S08	0.04-0.11	12	-	45	9	16.5	S08	11.7	●
MXEE 120L09R10-06S08	0.04-0.11	12	1.0	45	9	16.5	S08	11.7	●
MXEE 120L09R15-06S08	0.04-0.11	12	1.5	45	9	16.5	S08	11.7	●

- ▶ La chiave deve essere ordinata separatamente
- ▶ FHA : Angolo d'elica

●: Standard

MXED-08/10

Fresa piana e torica 8-10 taglienti per materiali difficili senza taglio al centro



Descrizione	Avanz. (mm/z)	Dimensioni (mm)							Grado TT5523
		DC	NOF	RE	APMX	LF	THSZMS	DCONMS	
MXED 160L12R05-08S10	0.05-0.13	16	8	0.5	12	20.5	S10	15.3	●
160L12R10-08S10	0.05-0.13	16	8	1.0	12	20.5	S10	15.3	●
160L12R20-08S10	0.05-0.13	16	8	2.0	12	20.5	S10	15.3	●
200L15R10-10S12	0.05-0.13	20	10	1.0	15	25.5	S12	18.3	●
200L15R20-10S12	0.05-0.13	20	10	2.0	15	25.5	S12	18.3	●
250L22R10-10S15	0.05-0.13	25	10	1.0	22	37.0	S15	23.9	●
250L22R20-10S15	0.05-0.13	25	10	2.0	22	37.0	S15	23.9	●

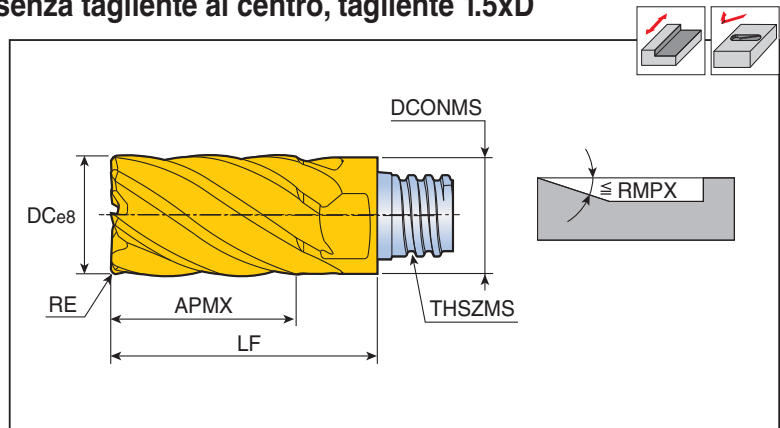
- ▶ La chiave deve essere ordinata separatamente
- ▶ NOF: Numero di taglienti

●: Standard

MXED-I07/I09-1.5D new



Fresa torica 7-9 taglienti a passo variabile senza tagliente al centro, tagliente 1.5xD



Descrizione	Avanz. (mm/z)	Dimensioni (mm)									Grado TT5523
		DC	NOF	RE	APMX	LF	THSZMS	DCONMS	RMPX		
MXED 100L15R05I07S06	0.04-0.10	10	7	0.5	15	22.0	S06	9.6	3	●	
120L18R05I07S08	0.04-0.10	12	7	0.5	18	27.0	S08	11.7	3	●	
160L24R08I09S10	0.05-0.10	16	9	0.8	24	33.5	S10	15.3	1	●	
200L30R10I09S12	0.05-0.10	20	9	1.0	30	41.0	S12	18.5	1	●	

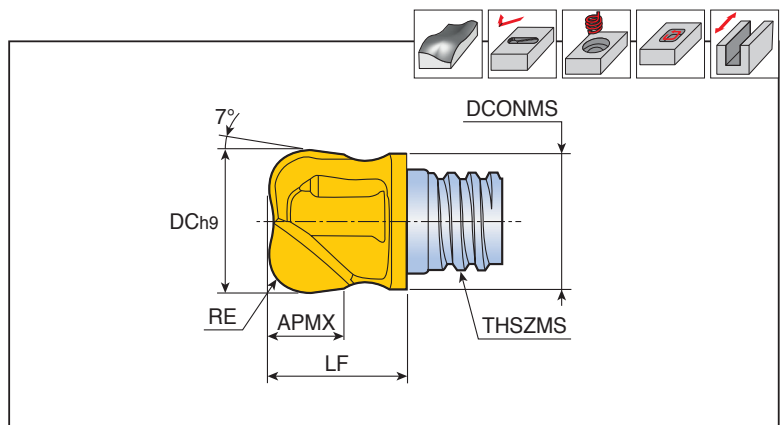
- ▶ La chiave deve essere ordinata separatamente
- ▶ NOF: Numero di taglienti
- ▶ RMPX: Massimo angolo di rampa

●: Standard

MXRB-02



Fresa torica 2 taglienti con sforno a 7°



Descrizione	Avanz. (mm/z)	Dimensioni (mm)						Grado TT5523
		DC	RE	APMX	LF	THSZMS	DCONMS	
MXRB 200L11R50-02S12	0.05-0.15	20	5.0	11.3	17.3	S12	18.3	●

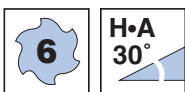
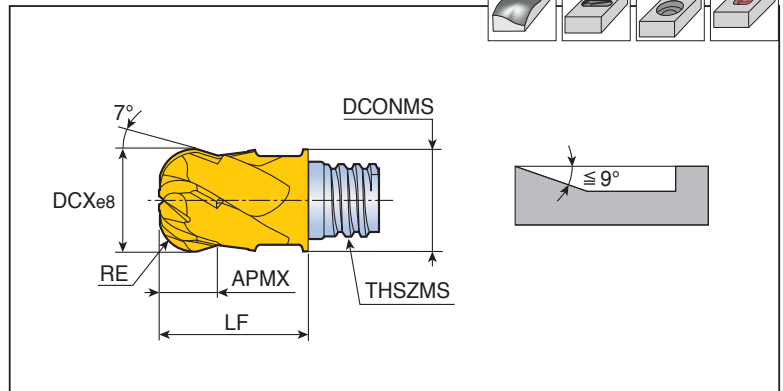
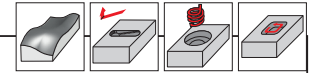
- ▶ La chiave deve essere ordinata separatamente

●: Standard



MXRD-06

Fresa torica 6 taglienti con sfilo a 7°



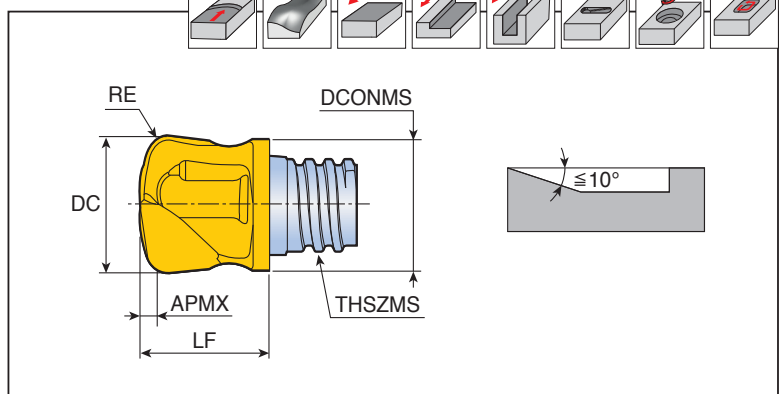
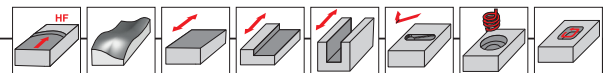
Descrizione	Dimensioni (mm)						Grado TT5523
	DCX	RE	APMX	LF	THSZMS	DCONMS	
MXRD 080L04R20-06S05	8	2.0	4	10.0	S05	7.7	●
100L05R30-06S06	10	3.0	5	13.0	S06	9.7	●
120L07R40-06S08	12	4.0	7	16.5	S08	11.7	●
160L09R50-06S10	16	5.0	9	20.5	S10	15.3	●

► La chiave deve essere ordinata separatamente

●: Standard

MXFX-02

Fresa ad alto avanzamento 2 taglienti



Descrizione	Avanz. (mm/z)	Dimensioni (mm)						Grado TT5523
		DC	RE	APMX	LF	THSZMS	DCONMS	
MXFX 100L0.6R20-02S06	0.30-0.60	10	2.0	0.6	12.5	S06	9.6	●
120L1.0R25-02S08	0.50-1.00	12	2.5	0.68	11.1	S08	11.5	●
160L1.1R30-02S10	0.55-1.10	16	3.0	1.1	20.0	S10	15.2	●
200L1.5R34-02S12 new	0.75-1.50	20	3.4	1.5	17.4	S12	18.3	●

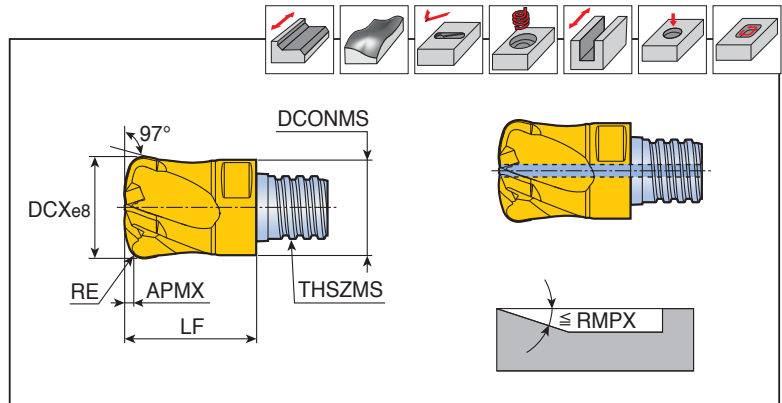
► La chiave deve essere ordinata separatamente

●: Standard



MXFX-04/06 new

Fresa ad alto avanzamento 4-6 taglienti



Descrizione	Avanz. (mm/z)	Dimensioni (mm)									Fori refriger.	Grado	
		DC	NOF	RE	APMX	LF	THSZMS	DCONMS	RMPX	TT5513		TT5523	
MXFX 080L0.4R16-04S05	0.12-0.48	8	4	1.62	0.4	10.0	S05	7.5	5	X	●		
100L0.5R20-04S06	0.16-0.57	10	4	2.01	0.5	13.0	S06	9.5	5	X	●		
100L0.4R10-06S06C	0.16-0.47	10	6	1.00	0.45	10.0	S06	9.5	3	●	●		
120L0.6R18-04S08C	0.16-0.67	12	4	1.80	0.6	16.5	S08	11.5	5	●		●	
120L0.6R24-04S08	0.16-0.67	12	4	2.47	0.6	16.5	S08	11.5	5	X	●		
120L0.6R12-06S08C	0.16-0.54	12	6	1.20	0.65	12.0	S08	11.5	3	●	●		
160L0.8R22-04S10C	0.20-0.75	16	4	2.20	0.8	20.5	S10	15.4	5	●		●	
160L0.8R32-04S10	0.20-0.75	16	4	3.25	0.8	20.5	S10	15.4	5	X	●		
200L1.0R40-04S12	0.20-0.90	20	4	4.02	1.0	25.5	S12	18.45	5	X	●		
250L1.2R31-06S15	0.25-1.00	25	6	3.10	1.2	25.0	S15	23.9	5	X	●		

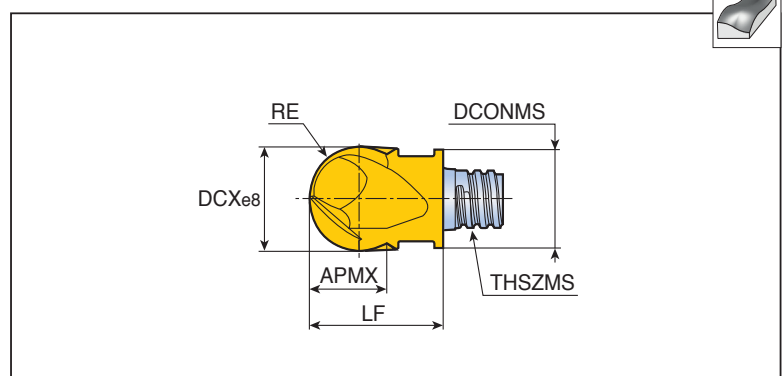
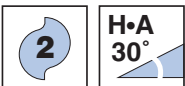
- La chiave deve essere ordinata separatamente
- NOF: Numero di taglienti
- RMPX: Massimo angolo di rampa

●: Standard

MXBD-BG-02



Fresa sferica 2 taglienti per lavorazione di precisione



Descrizione	Dimensioni (mm)						Grado
	DCX	RE	APMX	LF	THSZMS	DCONMS	
MXBD 080L05-BG-02S05	8	3.98 ⁽¹⁾	5	10.0	S05	7.7	●
100L07-BG-02S06	10	4.98 ⁽¹⁾	7	13.0	S06	9.7	●
120L09-BG-02S08	12	5.98 ⁽²⁾	9	16.5	S08	11.7	●
160L09-BG-02S10	16	7.98 ⁽²⁾	9	20.5	S10	15.3	●

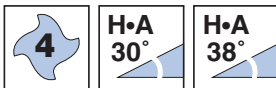
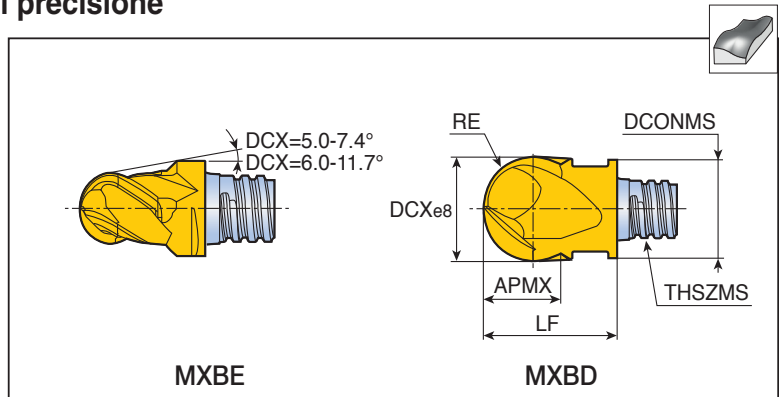
- La chiave deve essere ordinata separatamente
- RE Tolleranza: ⁽¹⁾ ± 0.01, ⁽²⁾ ± 0.012

●: Standard



MXBD(E)-BG-04

Fresa sferica 4 taglienti per lavorazione di precisione



Descrizione	Dimensioni (mm)							Grado
	DCX	RE	FHA	APMX	LF	THSZMS	DCONMS	TT5523
MXBE 050L07-BG-04S05 new	5	2.49 ⁽¹⁾	38	7.0	15.0	S05	8.0	●
060L04-BG-04S04 new	6	2.99 ⁽¹⁾	38	4.0	8.5	S04	5.8	●
060L05-BG-04S05	6	2.99 ⁽¹⁾	38	5.5	10.0	S05	8.0	●
MXBD 080L05-BG-04S05	8	3.98 ⁽¹⁾	30	5.0	10.0	S05	7.7	●
100L07-BG-04S06	10	4.98 ⁽¹⁾	30	7.0	13.0	S06	9.7	●
120L09-BG-04S08	12	5.98 ⁽²⁾	30	9.0	16.5	S08	11.7	●
160L12-BG-04S10	16	7.98 ⁽²⁾	30	12.0	20.5	S10	15.3	●
200L15-BG-04S12	20	9.97 ⁽²⁾	30	15.0	25.5	S12	18.3	●
250L22-BG-04S15	25	12.47 ⁽³⁾	30	22.0	37.0	S15	23.9	●

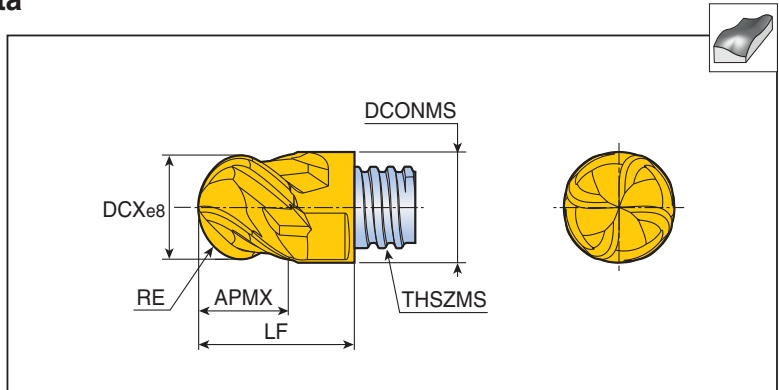
- ▶ La chiave deve essere ordinata separatamente
- ▶ RE Tolleranza: ⁽¹⁾± 0.01, ⁽²⁾± 0.012, ⁽³⁾± 0.02
- ▶ FHA: Angolo d'elica

●: Standard

MXBE-BH-04 new



Fresa sferica 4 taglienti ad alta produttività



Descrizione	Dimensioni (mm)						Grado
	DCX	RE	APMX	LF	THSZMS	DCONMS	TT5513
MXBE 080L05-BH-04S05	8	3.98 ⁽¹⁾	5.4	10.0	S05	7.7	●
100L07-BH-04S06	10	4.98 ⁽¹⁾	7.4	13.0	S06	9.6	●
120L09-BH-04S08	12	5.98 ⁽²⁾	9.3	16.5	S08	11.7	●
160L12-BH-04S10	16	7.98 ⁽²⁾	12.4	20.5	S10	15.3	●
200L16-BH-04S12	20	9.97 ⁽²⁾	16.0	25.5	S12	18.5	●

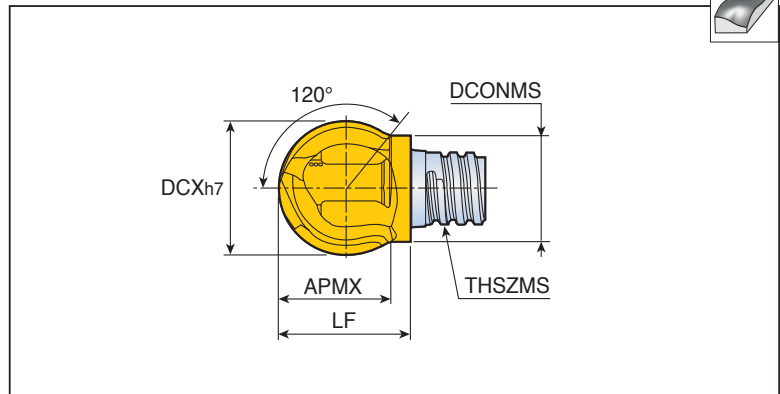
- ▶ La chiave deve essere ordinata separatamente
- ▶ RE Tolleranza: ⁽¹⁾± 0.01, ⁽²⁾± 0.012

●: Standard



MXBB-SG-02

Fresa sferica 2 taglienti a 240°



Descrizione	Dimensioni (mm)					Chiave	Grado TT5523
	DCX	APMX	LF	THSZMS	DCONMS		
MXBB 080L05-SG-02S04 new	8	5	8.2	S04	5.8	MX KEY-S04	●
100L07-SG-02S05 new	10	7	10.0	S05	7.6	MX KEY-S05	●
120L09-SG-02S06	12	9	11.6	S06	9.5	MX KEY-S08	●
160L12-SG-02S08 new	16	12	15.4	S08	12.2	MX KEY-S10	●
200L15-SG-02S10 new	20	15	18.4	S10	15.2	MX KEY-S10	●
250L18-SG-02S12 new	25	18	23.2	S12	18.3	MX KEY-S12	●

► La chiave deve essere ordinata separatamente

●: Standard

MXBE-BGA02

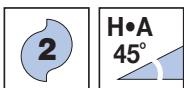
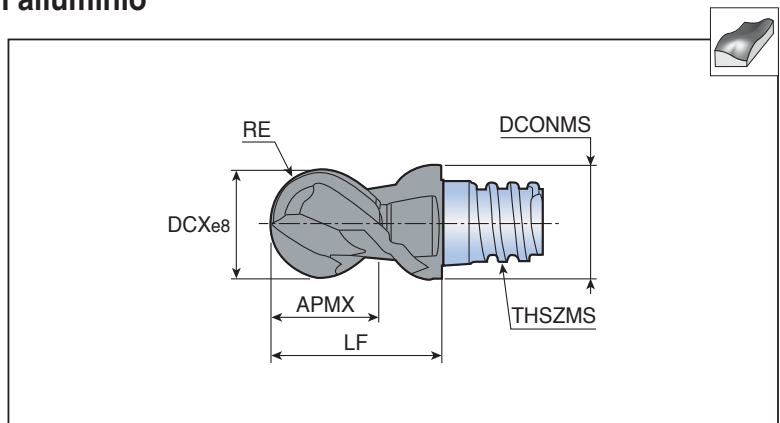
Fresa sferica 2 taglienti per lavorazione di alluminio



UF10



TTA101



Descrizione	Dimensioni (mm)						Grado	
	DCX	RE	APMX	LF	THSZMS	DCONMS	UF10	TTA101
MXBE 080L05-BGA02S05	8	3.98 ⁽¹⁾	5	10.0	S05	7.7	●	●
100L07-BGA02S06	10	4.98 ⁽¹⁾	7	13.0	S06	9.7	●	●
120L09-BGA02S08	12	5.98 ⁽²⁾	9	16.5	S08	11.7	●	●
160L12-BGA02S10	16	7.98 ⁽²⁾	12	20.5	S10	15.3	●	●
200L15-BGA02S12	20	9.97 ⁽²⁾	15	25.5	S12	18.3	●	●

► La chiave deve essere ordinata separatamente

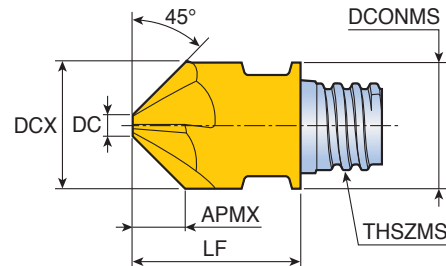
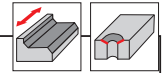
●: Standard

► RE Tolleranza: ⁽¹⁾± 0.01, ⁽²⁾± 0.012

MXCA-04/06



Fresa 4-6 taglienti per smussatura e svasatura senza taglio al centro



Descrizione	Dimensioni (mm)							Grado
	DCX	DC	NOF	APMX	LF	THSZMS	DCONMS	TT5523
MXCA 100L04A45-04S06	10.0	1.95	4	4.0	13.0	S06	10.0	●
120L05A45-04S08	12.0	1.95	4	5.0	16.5	S08	12.0	●
127L05A45-04S08	12.7	1.98	4	5.3	16.5	S08	12.7	●
160L06A45-06S10	16.0	3.0	6	6.5	20.3	S10	16.0	●
200L07A45-06S12	20.0	5.0	6	7.5	25.5	S12	20.0	●

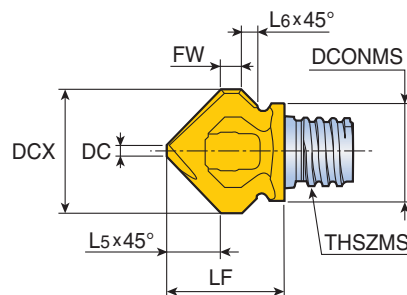
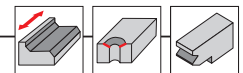
- ▶ La chiave deve essere ordinata separatamente
- ▶ NOF: Numero di taglienti

●: Standard

MXCW-02



Fresa 2 taglienti per doppia smussatura



Descrizione	Dimensioni (mm)								Chiave	Grado
	DCX	DC	L5	LF	FW	L6	THSZMS	DCONMS		TT5523
MXCW 098L04A45-02S05 new	9.8	1.2	4.3	10.8	2.5	1.2	S05	7.6	MX KEY-S06	●
118L05A45-02S06	11.8	1.2	5.3	11.2	2.0	1.2	S06	9.3	MX KEY-S08	●
157L07A45-02S08 new	15.7	1.5	7.1	14.0	2.0	1.2	S08	11.5	MX KEY-S10	●

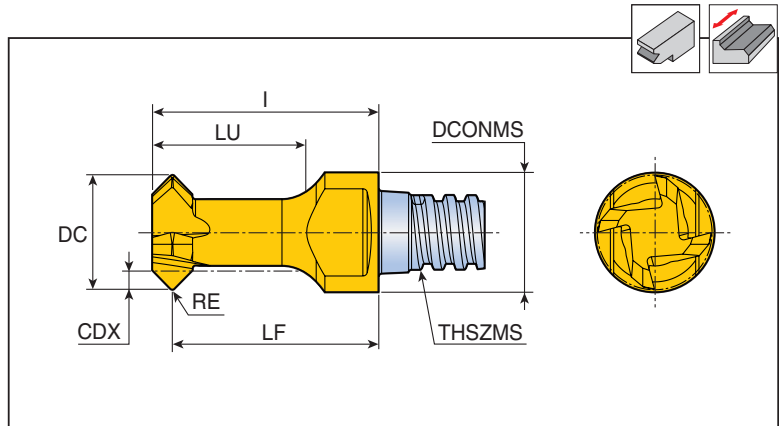
- ▶ La chiave deve essere ordinata separatamente

●: Standard



MXCS-04 new

Fresa 4 taglienti per doppia smussatura



Descrizione	Dimensioni (mm)								Grado
	DC	CDX	RE	LF	LU	I	THSZMS	DCONMS	TT5523
MXCS 077L10A45-04S05	7.7	1.2	0.2	13.9	10.2	15.2	S05	8.0	●

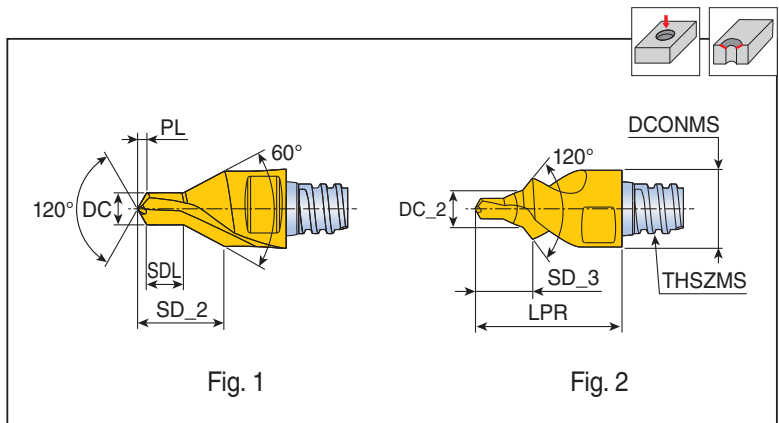
► La chiave deve essere ordinata separatamente

●: Standard

MXDP-02



Punta da centro 2 taglienti



Descrizione	Dimensioni (mm)										Grado
	DC	DC2	SDL	SD_2	SD_3	LPR	THSZMS	DCONMS	PL	Fig	TT5523
MXDP 107L01A30-02S04 new	1.07	-	1.32	4.14	-	10.0	S04	6.0	0.28	1	●
165L02A30-02S04 new	1.65	-	1.97	4.45	-	10.0	S04	6.0	0.43	1	●
207L02A30-02S04 new	2.07	-	2.36	6.37	-	10.0	S04	6.0	0.54	1	●
328L04A30-02S05	3.28	-	3.75	8.76	-	15.0	S05	8.0	0.85	1	●
412L05A30-02S06	4.12	-	4.83	11.05	-	19.0	S06	10.0	1.07	1	●
513L07A30-02S08	5.13	-	5.88	13.23	-	23.0	S08	12.0	1.32	1	●
646L08A30-02S10	6.46	-	7.25	17.18	-	28.0	S10	16.0	1.65	1	●
MXDP 324L04B30-02S08 new	3.24	6.77	3.55	7.40	8.94	23.0	S08	12.0	0.83	2	●
509L06B30-02S12 new	5.09	10.69	5.56	11.70	14.17	25.5	S12	18.5	1.33	2	●
641L08B30-02S12 new	6.41	13.29	6.95	14.50	16.58	25.5	S12	20.0	1.68	2	●

► La chiave deve essere ordinata separatamente

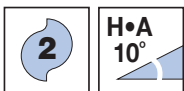
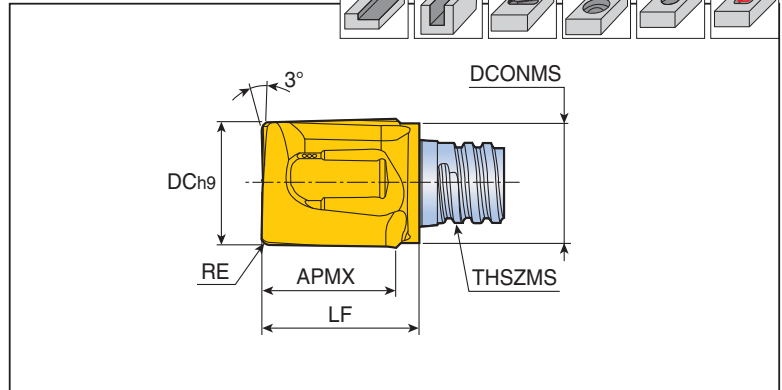
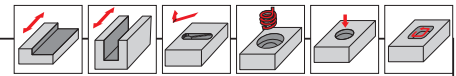
●: Standard

► SDL: Profondità centrino



MXGC-02

Fresa torica 2 taglienti per allargatura



Descrizione	Avanz. (mm/z)	Dimensioni (mm)						Grado TT5523
		DC	RE	APMX	LF	THSZMS	DCONMS	
MXGC 080L08R04-02S05	0.03-0.09	8	0.4	7.7	10.0	S05	7.6	●
080L08R10-02S05	0.03-0.09	8	1.0	7.7	10.0	S05	7.6	●
100L09R04-02S06	0.03-0.10	10	0.4	9.0	12.4	S06	9.5	●
100L09R20-02S06	0.03-0.10	10	2.0	9.0	12.4	S06	9.5	●
120L10R04-02S08	0.04-0.11	12	0.4	10.0	14.2	S08	11.5	●
120L10R10-02S08	0.04-0.11	12	1.0	10.0	14.2	S08	11.5	●
120L10R20-02S08	0.04-0.11	12	2.0	10.0	14.2	S08	11.5	●
160L15R04-02S10	0.05-0.13	16	0.4	14.9	19.0	S10	15.2	●

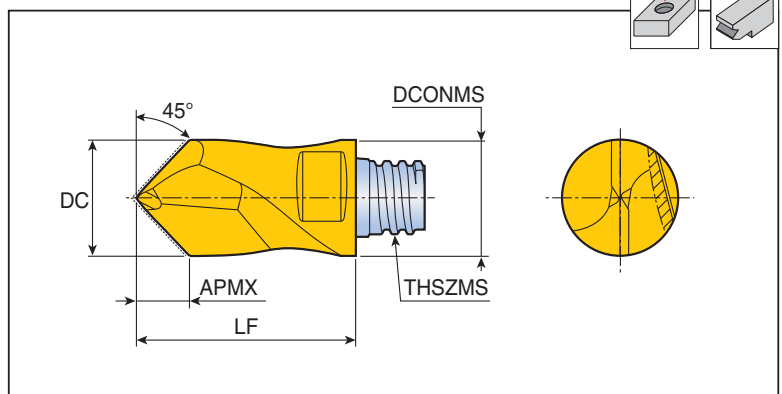
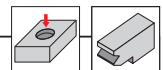
► La chiave deve essere ordinata separatamente

●: Standard

MXDS-02 new



Fresa 2 taglienti per foratura e smussatura



Descrizione	Dimensioni (mm)					Grado TT5523
	DC	APMX	LF	THSZMS	DCONMS	
MXDS 060A45-02S04	6	2.7	11.0	S04	5.7	●
080A45-02S05	8	3.7	15.0	S05	7.7	●
100A45-02S06	10	4.4	19.0	S06	9.7	●
120A45-02S08	12	5.4	23.0	S08	11.7	●
160A45-02S10	16	7.1	28.0	S10	15.3	●

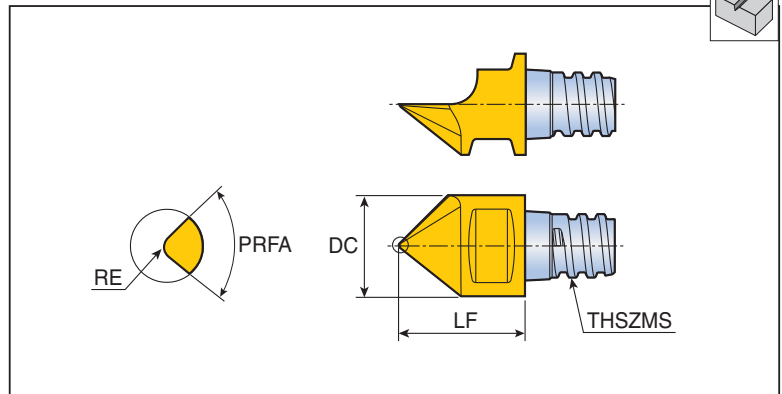
► La chiave deve essere ordinata separatamente

●: Standard



MXEG-01 new

Fresa 1 tagliente per incisioni



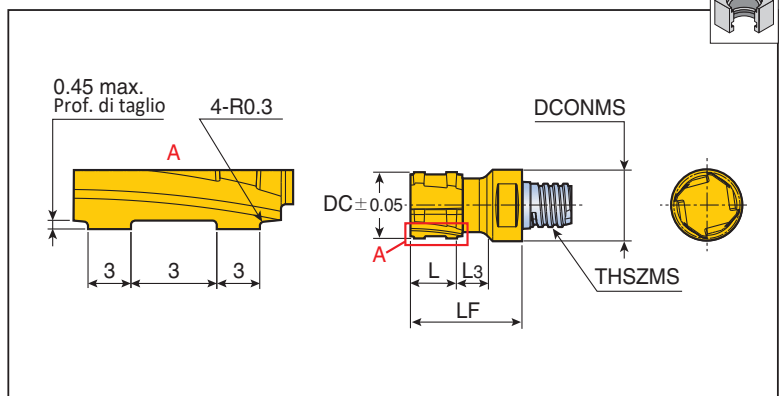
Descrizione	Dimensioni (mm)					Grado
	DC	RE	PRFA	LF	THSZMS	TT5523
MXEG 060A60-01S04	6	0.2	60	8.5	S04	●
080A30-01S05	8	0.2	30	10.0	S05	●
080A45-01S05	8	0.2	45	10.0	S05	●
080A60-01S05	8	0.2	60	10.0	S05	●
080A90-01S05	8	0.2	90	10.0	S05	●

► La chiave deve essere ordinata separatamente

●: Standard

MXDG-04 new

Fresa 4 taglienti per piastre di scambiatori di calore



Descrizione	Dimensioni (mm)							Chiave	Grado
	DC	L	L3	LF	THSZMS	DCONMS	D _{MIN}		TT5523
MXDG 155-04S10-8238	15.5	14.2	17.8	33.7	S10	16.0	15.88	MX KEY S08	●
185-04S12-8239	18.5	14.5	18.3	34.5	S12	18.5	19.05	MX KEY S10	●
245-04S15-8240	24.5	14.4	11.0	37.2	S15	23.8	25.40	MX KEY S15	●

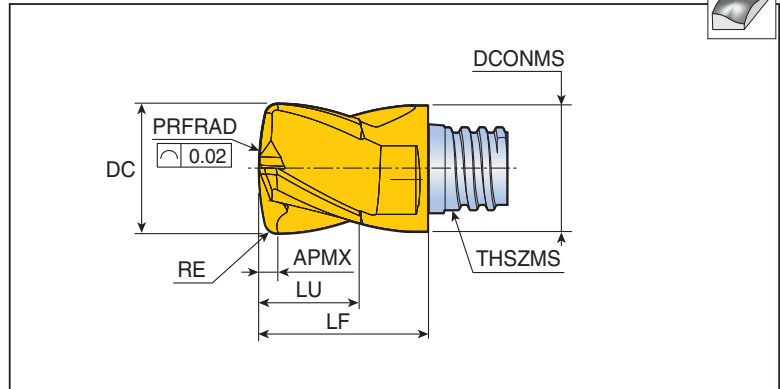
► La chiave deve essere ordinata separatamente

●: Standard



MXCSL

Fresa a lente 4 taglienti per lavorazioni a 5 assi



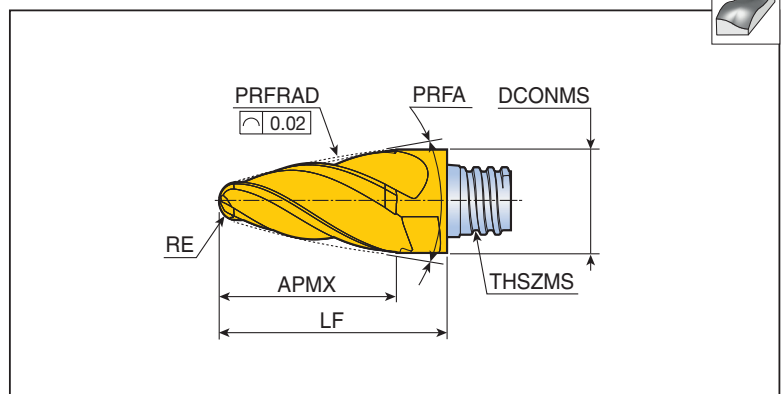
Descrizione	Avanz. (mm/z)	Dimensioni (mm)								Grado
		DC	PRFRAD	RE	APMX	LU	LF	THSZMS	DCONMS	TT5523
MXCSL 4080R016-S05	0.02-0.08	8	16	0.5	0.9	5.5	10.0	S05	8	●
4100R020-S06	0.03-0.09	10	20	1.0	1.4	7.5	13.0	S06	10	●
4120R024-S08	0.03-0.10	12	24	1.0	1.6	9.0	16.5	S08	12	●
4160R032-S10	0.04-0.12	16	32	1.0	1.8	12.0	20.5	S10	16	●

- ▶ La chiave deve essere ordinata separatamente
- ▶ PRFRAD: Raggio del profilo

●: Standard

MXCSO

Fresa ovale 4 taglienti per lavorazioni a 5 assi



Descrizione	Avanz. (mm/z)	Dimensioni (mm)							Grado
		PRFRAD	RE	APMX	LF	PRFA	THSZMS	DCONMS	TT5523
MXCSO 4080R080-S05	0.02-0.08	80	1.5	14.2	18.0	24	S05	8	●
4100R085-S06	0.03-0.09	85	2.0	16.5	22.0	24	S06	10	●
4120R075-S08	0.03-0.10	75	2.0	21.3	27.0	24	S08	12	●
4160R075-S10	0.04-0.12	75	3.0	27.0	33.4	24	S10	16	●

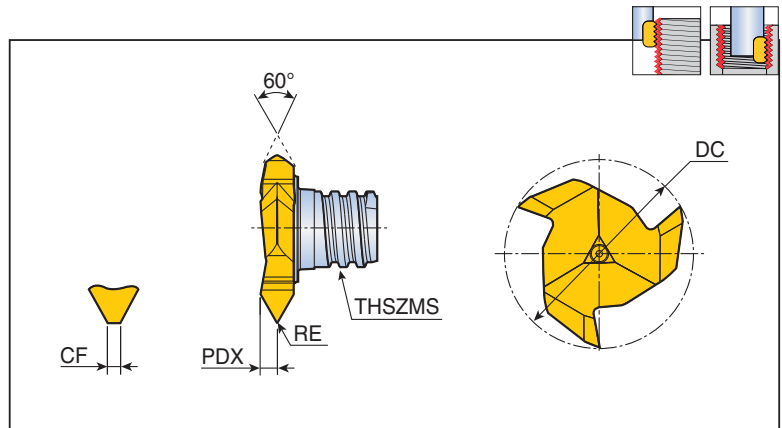
- ▶ La chiave deve essere ordinata separatamente
- ▶ PRFRAD: Raggio del profilo

●: Standard

TTRD-A60 new



Fresa 3-4 taglienti per filettatura ISO



Descrizione	TP	Dimensioni (mm)							Grado
		DC	NOF	PDX	RE	CF	RANGE	THSZMS	
TTRD 16A60-0.5P-3S06	0.5-2.0	15.7	3	1.4	-	0.05	M20	S06	●
16A60-1.5P-3S06	1.5-2.0	15.7	3	1.4	0.05	-	M22	S06	●
22A60-3.0P-4S08	3.0-4.5	21.7	4	2.4	0.20	-	M36	S08	●

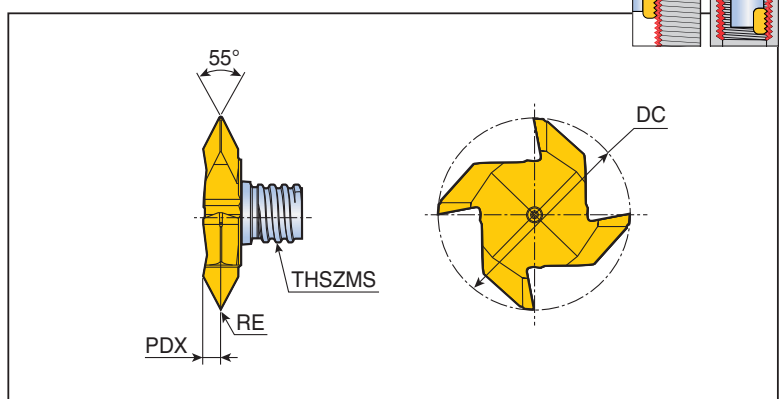
- ▶ La chiave deve essere ordinata separatamente
- ▶ NOF: Numero di taglienti
- ▶ TP: Passo per filetto

●: Standard

TTRD-W55 new



Fresa 4 taglienti per filettatura whitworth



Descrizione	TPI	Dimensioni (mm)					Grado
		DC	PDX	RE	RANGE	THSZMS	
TTRD 22W55-14P-4S08	14-11	21.7	2.0	0.2	3/4	S08	●

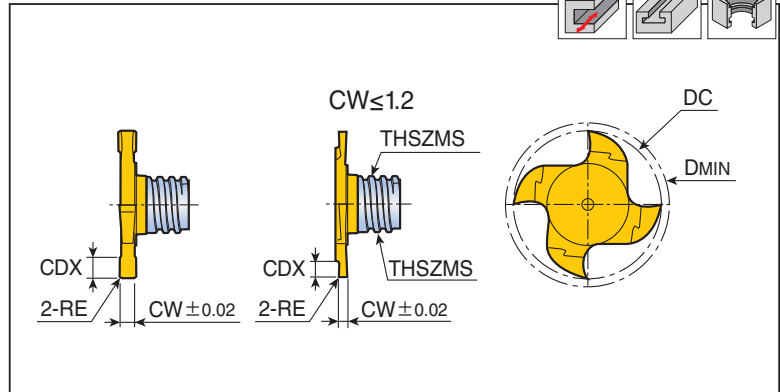
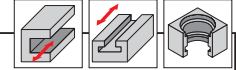
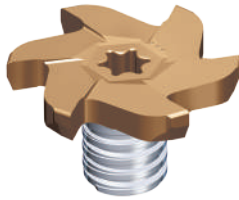
- ▶ La chiave deve essere ordinata separatamente
- ▶ TPI: Passo per filetto

●: Standard

TST-4/6



Fresa 4-6 taglienti per scanalatura



Descrizione	Avanz. (mm/z)	Dimensioni (mm)								Grado	
		DC	NOF	CW	CDX	RE	THSZMS	DMIN	Torx	TT5523	TT5543
TST 217W0.76R000-4S08	0.03-0.10	21.7	4	0.76 ⁽¹⁾	1.5	-	S08	22	-		●
217W0.96R000-4S08	0.03-0.10	21.7	4	0.96 ⁽¹⁾	1.9	-	S08	22	-		●
217W1.0R005-4S08	0.03-0.10	21.7	4	1.0	2.0	0.05	S08	22	-		●
217W1.20R005-4S08	0.03-0.12	21.7	4	1.2 ⁽¹⁾	4.5	0.05	S08	22	-		●
217W1.40R005-4S08	0.03-0.12	21.7	4	1.4 ⁽¹⁾	4.5	0.05	S08	22	-		●
217W1.57R000-4S08	0.03-0.12	21.7	4	1.57	4.5	-	S08	22	-		●
217W1.70R010-4S08	0.03-0.12	21.7	4	1.7 ⁽¹⁾	4.5	0.1	S08	22	-		●
217W1.95R020-4S08	0.03-0.12	21.7	4	1.95 ⁽¹⁾	4.5	0.2	S08	22	-		●
217W2.0R020-4S08	0.03-0.12	21.7	4	2.0	4.5	0.2	S08	22	-		●
217W2.25R020-4S08	0.03-0.12	21.7	4	2.25 ⁽¹⁾	4.5	0.2	S08	22	-		●
217W2.39R020-4S08	0.03-0.12	21.7	4	2.39	4.5	0.2	S08	22	-		●
217W2.50R020-4S08	0.03-0.12	21.7	4	2.5	4.5	0.2	S08	22	-		●
217W2.75R020-4S08	0.03-0.13	21.7	4	2.75 ⁽¹⁾	4.5	0.2	S08	22	-		●
217W3.0R020-4S08	0.03-0.13	21.7	4	3.0	4.5	0.2	S08	22	-		●
217W3.17R020-4S08	0.03-0.15	21.7	4	3.17	4.5	0.2	S08	22	-		●
217W3.25R020-4S08	0.03-0.15	21.7	4	3.25 ⁽¹⁾	4.5	0.2	S08	22	-		●
217W4.0R020-4S08	0.03-0.15	21.7	4	4.0	4.5	0.2	S08	22	-		●
217W4.25R020-4S08	0.03-0.15	21.7	4	4.25 ⁽¹⁾	4.5	0.2	S08	22	-		●
217W4.75R020-4S08	0.03-0.15	21.7	4	4.75	4.5	0.2	S08	22	-		●
217W5.25R020-4S08	0.03-0.17	21.7	4	5.25 ⁽¹⁾	4.5	0.2	S08	22	-		●
217W6.0R300-4S08 new	0.03-0.17	21.7	4	6.0	4.5	3	S08	22	-	●	
277W2.50R020-6S10	0.03-0.12	27.7	6	2.5	6.0	0.2	S10	28	T40		●
277W5.25R020-6S10	0.03-0.17	27.7	6	5.25	6.0	0.2	S10	28	T40		●
277W10R020-6S10	0.03-0.17	27.7	6	10.0	6.0	0.2	S10	28	T40		●

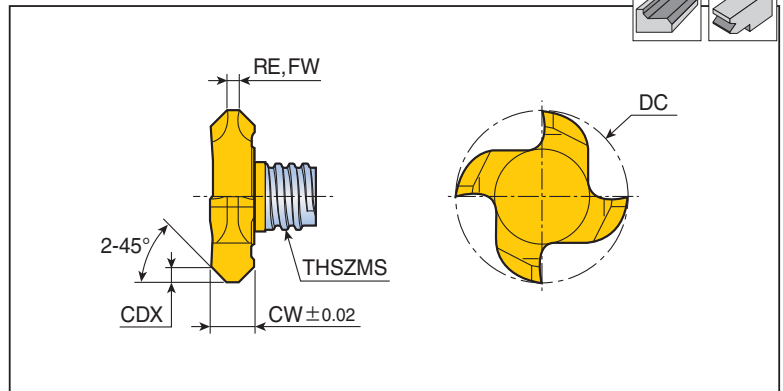
- ▶ La chiave deve essere ordinata separatamente
- ▶ NOF: Numero di taglienti
- ▶ ⁽¹⁾ CW per anelli seeger DIN 471/472

●: Standard

TST-A45



Fresa 3-6 taglienti per scanalatura con smusso a 45°



Descrizione	Avanz. (mm/z)	Dimensioni (mm)							Grado	
		DC	NOF	CW	CDX	RE	FW	THSZMS	TT5523	TT5543
TST 177L01.40A45-3S06	0.03-0.15	17.7	3	3.4	1.4	0.1	-	S06		●
217L01.70A45-4S08	0.03-0.17	21.7	4	5.5	1.7	-	1.5	S08		●
277L04.00A45-6S10 new	0.03-0.17	27.7	6	9.8	4.0	-	0.5	S10	●	

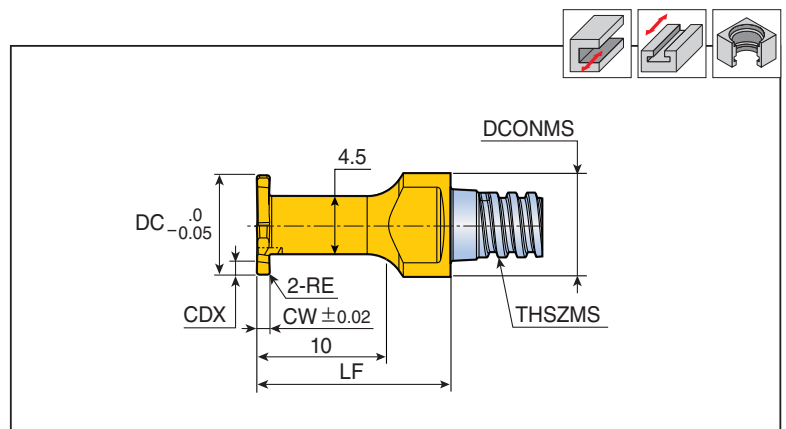
- ▶ La chiave deve essere ordinata separatamente
- ▶ NOF: Numero di taglienti
- ▶ FW: Larghezza piano

●: Standard

TTB-04 new



Fresa 4 taglienti per scanalatura



Descrizione	Avanz. (mm/z)	Dimensioni (mm)							Grado	
		DC	CW	CDX	RE	LF	THSZMS	DCNMS	TT5523	
TTB 077W1.0R02-04S05	0.02-0.08	7.7	1.0	1.2	0.2	15	S05	8.0		●
077W1.5R02-04S05	0.02-0.08	7.7	1.5	1.2	0.2	15	S05	8.0		●
077W2.0R02-04S05	0.02-0.08	7.7	2.0	1.2	0.2	15	S05	8.0		●

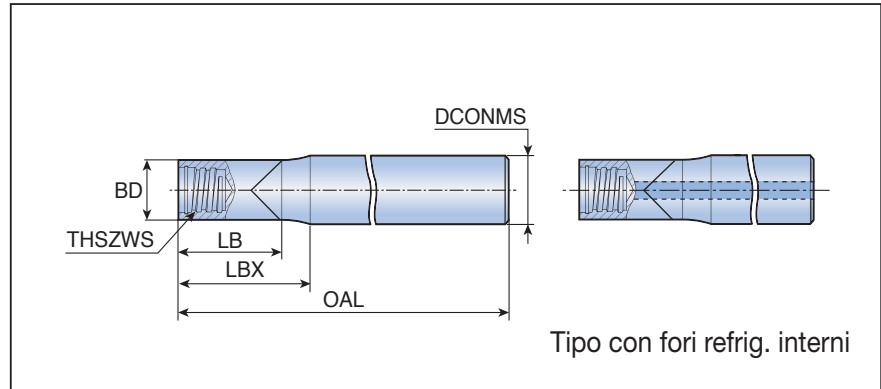
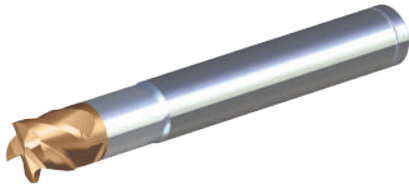
- ▶ La chiave deve essere ordinata separatamente

●: Standard

MXSSD-C



Stelo cilindrico in carburo con scarico



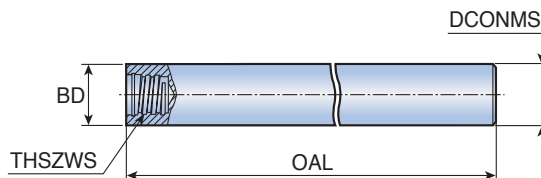
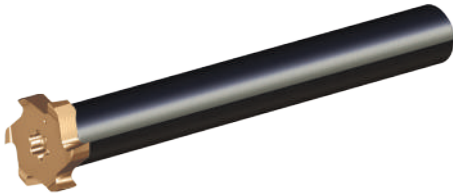
Descrizione	Dimensioni (mm)						Fori refrig.	Materiale stelo
	THSZWS	DCONMS	BD	OAL	LB	LBX		
MXSSD 08L070S05-C	S05	8	7.6	70	19	20	X	Carburo
08L090S05-C	S05	8	7.6	90	39	40	X	Carburo
08L110S05-C	S05	8	7.6	110	59	60	X	Carburo
10L070S06-C	S06	10	9.6	70	18.5	20	X	Carburo
10L090S06-C	S06	10	9.6	90	38.5	40	X	Carburo
10L110S06-C	S06	10	9.6	110	58.5	60	X	Carburo
10L150S06-C	S06	10	9.6	150	98.5	100	X	Carburo
12L070S08-C	S08	12	11.5	70	17	20	X	Carburo
12L070S08-C-A new	S08	12	11.5	70	17	20	●	Carburo
12L090S08-C	S08	12	11.5	90	37	40	X	Carburo
12L090LS08-C-A new	S08	12	11.5	90	37	40	●	Carburo
12L110S08-C	S08	12	11.5	110	57	60	X	Carburo
12L110S08-C-A new	S08	12	11.5	110	57	60	●	Carburo
12L130S08-C	S08	12	11.5	130	77	80	X	Carburo
12L130S08-C-A new	S08	12	11.5	130	77	80	●	Carburo
16L090S10-C	S10	16	15.2	90	38	40	X	Carburo
16L090S10-C-A new	S10	16	15.2	90	38	40	●	Carburo
16L110S10-C	S10	16	15.2	110	58	60	X	Carburo
16L110S10-C-A new	S10	16	15.2	110	58	60	●	Carburo
16L130S10-C	S10	16	15.2	130	78	80	X	Carburo
16L130S10-C-A new	S10	16	15.2	130	78	80	●	Carburo
16L150S10-C	S10	16	15.2	150	98	100	X	Carburo
20L090S12-C	S12	20	18.3	90	37	40	X	Carburo
20L130S12-C	S12	20	18.3	130	77	80	X	Carburo
20L200S12-C	S12	20	18.3	200	117	120	X	Carburo
25L120S15-C	S15	25	23.9	120	58	60	X	Carburo
25L170S15-C	S15	25	23.9	170	98	100	X	Carburo
25L250S15-C	S15	25	23.9	250	148	150	X	Carburo

► THSZWS: Dimensione del filetto di attacco



MXSTD-S

Stelo cilindrico in acciaio per testine di scanalatura TTB



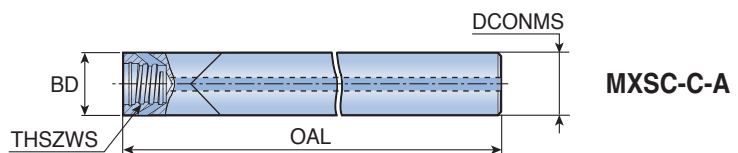
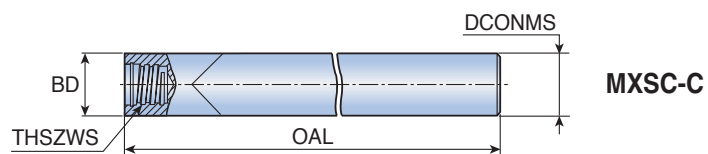
Descrizione	Dimensioni (mm)				Materiale stelo
	THSZWS	DCONMS	BD	OAL	
MXSTD 06L070S04-S new	S04	6	6	70	Acciaio
08L050S05-S	S05	8	8	50	Acciaio
08L070S05-S	S05	8	8	70	Acciaio
10L050S06-S	S06	10	10	50	Acciaio
10L080S06-S	S06	10	10	80	Acciaio
12L090S08-S	S08	12	12	90	Acciaio
16L100S10-S	S10	16	16	100	Acciaio

► THSZWS: Dimensione del filetto di attacco



MXSC-C

Stelo cilindrico in carburo per testine di scanalatura TTB




Descrizione	Dimensioni (mm)				Fori refrig.	Materiale stelo
	THSZWS	DCONMS	BD	OAL		
MXSC 100L100S06-C	S06	10	10	100	X	Carburo
120L100S08-C-A	S08	12	12	100	●	Carburo

► THSZWS: Dimensione del filetto di attacco

Ricambi






Chiavi

Foto	Descrizione	Dimensioni attacco	Coppia (N.m)	Testina
	MX KEY-S05	S04, S05	7	Piana Sferica Torica Centrinatura Smussatura Allargatura
	MX KEY-S06	S06	10	
	MX KEY-S08	S08	15	
	MX KEY-S10	S10	28	
	MX KEY-S12	S12	28	
	MX KEY-S15	S15	40	
	MX SKEY-S06	S06	10	TST, TTRD
	MX SKEY-S08	S08	15	
	MX SKEY-T40L	S08	15	MXFM TDT TTB TST-6S10
		S10	28	
	MX SKEY-T20	S05	7	
		S06	10	
	MX SKEY-T25	S06	10	
	MX SKEY-T30L	S08	15	
MX SKEY-T50L	S08	15		
		S10	28	

► La chiave deve essere ordinata separatamente

Chiavi dinamometriche

Foto	Descrizione	Attacco	Descrizione testina	Coppia (N.m)
Manico 	TORQUE WRENCH 5-50Nm 9x12	-	-	-
Chiave per testine cilindriche 	MX WRENCH 6-05	S04, S05	MXED, MXEE MXES, MXRD MXBE, MXDP MXCA	7
	MX WRENCH 8-06	S06		10
	MX WRENCH 10-08	S08		15
	MX WRENCH 13-10	S10		28
	MX WRENCH 16-12	S12		28
	MX WRENCH 20-15	S15		40
Chiave per testine a 2 taglienti 	MX WRENCH 4E-05	S05	MXRB, MXFX MXBB, MXCP MXGC, MXCW MXCR	7
	MX WRENCH 5E-06	S06		10
	MX WRENCH 7E-08	S08		15
	MX WRENCH 8E-10	S10		28
	MX WRENCH 9E-12	S12		28
Adattatore a 90° per chiavi torx 	INSERT TOOL 9x12mm	-	-	-
Chiave torx 	BIT SOCKET T20 DRIVE	S04, S05, S06	TTB TST277	7, 10
	BIT SOCKET T25 DRIVE	S06		10
	BIT SOCKET T30 DRIVE	S08		15
	BIT SOCKET T40 DRIVE	S08, S10		15, 28
	BIT SOCKET T50 DRIVE	S08, S10		15, 28

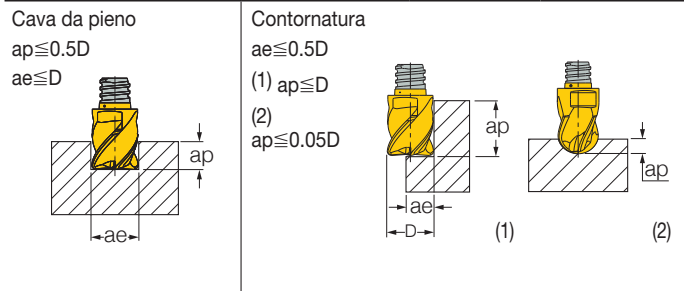
► La chiave deve essere ordinata separatamente

Condizioni di taglio raccomandate



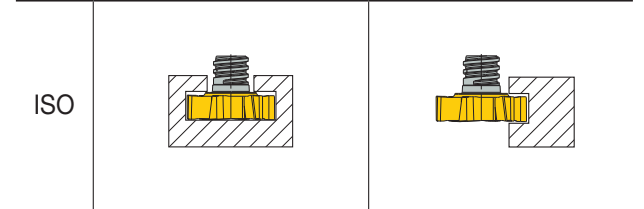
Dati di lavorazione per MAXI-RUSH

Fz testine piane, toriche o sferiche (mm/z)



D (mm)	Fz (mm/z)	D (mm)	Fz (mm/z)
6	0.027-0.05	6	0.027-0.06
8	0.032-0.07	8	0.032-0.08
10	0.034-0.08	10	0.034-0.09
12	0.036-0.10	12	0.036-0.11
16	0.050-0.12	16	0.05 - 0.13
20	0.052-0.14	20	0.052-0.15
25	0.062-0.15	25	0.062-0.17

Fz testine di scanalatura (mm/z)



ISO	Fz (mm/z)	Fz (mm/z)
P	0.025-0.12	0.035-0.15
M	0.025-0.10	0.025-0.12
K	0.025-0.15	0.035-0.17

Dimensioni attacco	Chiave	Coppia di serraggio (N.m)
S04, S05	MX KEY-S05	7
S06	MX KEY-S06	10
S08	MX KEY-S08	15
S10	MX KEY-S10	28
S12	MX KEY-S12	28
S15	MX KEY-S15	40

Velocità di taglio raccomandate Vt (m/min)

ISO	Materiale No.	Durezza HB	Vt m/min
P	1	125	220-240
	2	190	170-200
	3-6	200	140-160
	7-8	300	110-130
	9-11	200	100-130
M	12-13	240	90-150
	14	180	70-100
K	15	180	70-240
	16	260	110-220
	17	170	130-250
	19	130	130-230
	20	230	100-200
N	21-24	90	600-700
S	33-35	350	10-20
	36-37	-	30-50
H	38	HRC55	30-40
	39	HRC60	25-30

Frese ad alto avanzamento - solo MXFX

ISO	Materiale No.	Profondità di taglio (ap)	Largh. di taglio (ae)	Fz (mm/z) in base al diametro D(mm)					
				Ø8	Ø10	Ø12	Ø16	Ø20	Ø25
P	1	0.045xD	0.7xD	0.50	0.60	0.70	0.80	0.95	1.05
	2	0.045xD	0.7xD	0.50	0.60	0.70	0.80	0.95	1.05
	3	0.045xD	0.7xD	0.50	0.60	0.70	0.80	0.95	1.05
	4	0.045xD	0.7xD	0.50	0.60	0.70	0.80	0.95	1.05
	5	0.045xD	0.7xD	0.45	0.55	0.60	0.70	0.80	0.90
	6	0.045xD	0.7xD	0.35	0.45	0.50	0.60	0.70	0.80
	7	0.045xD	0.7xD	0.35	0.45	0.50	0.60	0.70	0.80
	8	0.045xD	0.7xD	0.35	0.40	0.45	0.55	0.65	0.75
	9	0.045xD	0.7xD	0.35	0.40	0.45	0.55	0.65	0.75
	10	0.04xD	0.6xD	0.30	0.35	0.40	0.50	0.6	0.70
	11	0.04xD	0.6xD	0.30	0.35	0.40	0.45	0.55	0.65
M	12-14	0.04xD	0.6xD	0.35	0.40	0.45	0.55	0.65	0.75
K	15-16	A _{pmax}	0.7xD	0.50	0.55	0.65	0.75	0.85	0.95
	17-20	A _{pmax}	0.7xD	0.40	0.50	0.55	0.65	0.75	0.85
H	38.1	0.035xD	0.45xD	0.25	0.30	0.35	0.45	0.50	0.60
	38.2	0.03xD	0.3xD	0.20	0.25	0.35	0.40	0.50	0.55
	39	0.02xD	0.25xD	0.15	0.20	0.20	0.25	0.25	0.30