

HMMW[®]

hard metal working

**FRESATURA
MILLING**

2017-2018

CODIFICA DI FRESATURA - MILLING CODING

S	E	H	T
1	2	3	4

1 FORMA DELL'INSERTO INSERT SHAPE

2 ANGOLO DI SPOGLIA CLEARANCE ANGLE

3 TOLLERANZE TOLERANCES

Classe / Class	d	m	Spessore / Thickness
A	± 0,025	± 0,005	± 0,025
C	± 0,025	± 0,013	± 0,025
H	± 0,013	± 0,013	± 0,025
E	± 0,025	± 0,025	± 0,025
G	± 0,025	± 0,025	± 0,13
J	± 0,05 - ± 0,15	± 0,005	± 0,025
K	± 0,05 - ± 0,15	± 0,013	± 0,025
L	± 0,05 - ± 0,15	± 0,025	± 0,025
M	± 0,05 - ± 0,15	± 0,08 - ± 0,20	± 0,13
U	± 0,08 - ± 0,25	± 0,13 - ± 0,38	± 0,13

TOLLERANZE CLASSI C, H, R, T, W - TOLERANCE OF C, H, R, T, W

d	Tolleranza di d - Tolerance of d		Tolleranza di m - Tolerance of m	
	J, K, L, M, N	U	M, N	U
6,35	± 0,05	± 0,08	± 0,08	± 0,13
9,525	± 0,05	± 0,08	± 0,08	± 0,13
12,7	± 0,08	± 0,13	± 0,13	± 0,20
15,875	± 0,10	± 0,18	± 0,15	± 0,27
19,05	± 0,10	± 0,18	± 0,15	± 0,27
25,4	± 0,13	± 0,25	± 0,18	± 0,38

TOLLERANZE CLASSI D - TOLERANCE OF D

d	Tolleranza di d - Tolerance of d	Tolleranza di m - Tolerance of m
6,35	± 0,05	± 0,11
9,525	± 0,05	± 0,11
12,7	± 0,08	± 0,15
15,875	± 0,10	± 0,18
19,05	± 0,10	± 0,18

4 CARATTERISTICHE COSTRUTTIVE MACHINING AND FASTENING FEATURES

X TIPO SPECIALE - SPECIAL TYPE

CODIFICA DI FRESATURA - MILLING CODING

T3	AG08	S	N
6	7	8	9

5 LUNGHEZZA DEL TAGLIENTE, DIAMETRO DEL CERCHIO ISCRITTO CUTTING EDGE LENGHT

A, B, K

C, D, E, M, V

H, O, P

L

R

S

T

W

	06	09	11	16	22	27	33	44
	07	09	10	12	13	15	19	25
	04	06	07	11	15	19	23	31
	03	05	06	09	12	16	19	25

6 SPESSORE THICKNESS

Simbolo / Symbol	Spessore / Thickness
Metrico - Metric	mm
-	0,79
T0	1,00
01	1,59
T1	1,98
02	2,38
03	3,18
T3	3,97
04	4,76
05	5,56
06	6,35
08	8,00
07	7,94
09	9,52
11	11,11
12	12,70

7 VERTICE CORNER RADIUS

r mm	Simbolo - Symbol mm	r mm	Simbolo - Symbol mm
00	0,0	12	1,2
02	0,2	15	1,5
04	0,4	16	1,6
05	0,5	24	2,4
08	0,8	32	3,2
10	1,0	40	4,0

Angolo di registrazione - Approach angle Kr	Angolo di spoglia - Clearance angle a'n
A - 45°	A - 3°
D - 60°	B - 5°
E - 75°	C - 7°
F - 85°	D - 15°
P - 90°	E - 20°
Z - SPECIALE	F - 25°
	G - 30°
	N - 0°
	P - 11°

9 DIREZIONE DI TAGLIO CUTTING EDGE DIRECTION

R

L

N

8 PREPARAZIONE TAGLIANTE CUTTING EDGE FORMATION

F

E

T

S

10 ROMPITRUCIOLO DI FRESATURA MANUFACTURE'S SPECIFICATIONS

F3

M2

MA

ME

MF

RA

RX

R1

R2

R3

R4

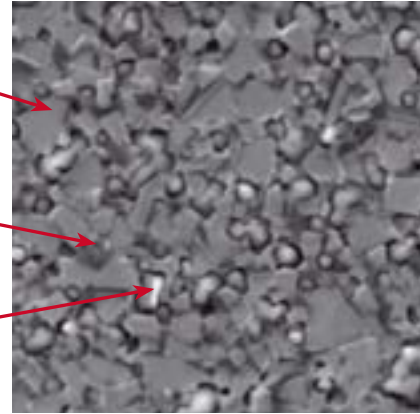
R5

TA

METALLO DURO - HARD METAL

LEGANTI E CARBURI METALLICI - BINDER AND METALLIC CARBIDES

WC	Il carburo di tungsteno WC conferisce resistenza all'usura, ha buona conducibilità termica <i>The tungsten carbide WC confer resistance to wear, good conductivity</i>
Co	Il cobalto è il legante del metallo duro e conferisce tenacità al materiale da taglio <i>The cobalt is the binder of the hard material and confer toughness to cutting materials</i>
Tic Tac	I carburi di titanio e tantalio aumentano le proprietà antisaldanti e migliorano la resistenza all'usura <i>The titanium carbides and tac increased the gluer property and improve resistance to wear</i>



MATERIALI DA TAGLIO - CUTTING MATERIALS

CLASSIFICAZIONE ISO DEI MATERIALI DA TAGLIO - CUTTING MATERIALS ACCORDING TO ISO

LETTERA LETTER	COLORE COLOUR	MATERIALE IN LAVORO WORKED MATERIAL	SCALA ISO ACCORDING TO ISO	Durezza Hardness	Tenacità Toughness
P	Blu Blue	Acciai in genere Acciai legati Steel Alloy steel	P01 P10 P20 P30 P50	+ ↑ ○ - ↓	- ↓ ○ + ↓
M	Giallo Yellow	Acciai inossidabili Stainless steel	M10 M20 M30 M40	+ ↑ ○ - ↓	- ↓ ○ + ↓
K	Rosso Red	Ghise Cast iron	K10 K20 K30 K40	+ ↑ ○ - ↓	- ↓ ○ + ↓
N	Verde Green	Alluminio e sue leghe Materiali non ferrosi Aluminium alloy Non metallic materials	N01 N10 N20 N30	+ ↑ ○ - ↓	- ↓ ○ + ↓
S	Arancio Orange	Leghe resistenti al calore Leghe di titanio High temperature alloy Titanium alloy	S10 S20 S30	+ ↑ ○ - ↓	- ↓ ○ + ↓
H	Grigio Grey	Acciai duri Ghise dure Hardened steel Hardened cast iron	H10 H20 H30	+ ↑ ○ - ↓	- ↓ ○ + ↓

CLASSIFICAZIONE ISO DEI MATERIALI DA TAGLIO

CUTTING MATERIALS ACCORDING TO ISO

GRUPPO - GROUP	DESCRIZIONE - DESCRIPTION	Rm(N/mm)
ACCIAIO, ACCIAIO INOSSIDABILE FERRITICO E MARTENSITICO - STEEL, STAINLESS STEEL FERRITIC AND MARTENSITIC		
1	Acciai molto teneri al carbonio - Acciai ferritici <i>Not alloy steel annealed (soft)</i>	<450
2	Acciai automatici	400<700
3	Acciai al carbonio con tenore basso -medio (c<0,5%) <i>Cast steel quenched and tempered</i>	450<550
4	Acciai al carbonio con tenore medio-alto (c>0,5%) Acciai medio duri per trattamenti termici - Acciai debolmente legati Acciai inossidabili ferritici e martensitici <i>Low alloy steel</i>	550<700
5	Acciai da utensili Acciai duri per trattamenti termici Acciai inossidabili martensitici <i>High alloy steel, tool steel annealed (soft) quenched and tempered</i>	700<900
6	Acciai da utensili di difficile lavorabilità Acciai con elevata durezza Acciai inossidabili martensitici <i>Stainless steel annealed quenched and tempered</i>	900<1200
7	Acciai ad alta resistenza di difficile lavorabilità (42-56 hrc) Acciai temprati dei gruppi 3-6 Acciai inossidabili martensitici <i>Stainless steel Ferritic - Martensitic</i>	>1200
ACCIAI INOSSIDABILI AUTOMATICI, AUSTENITICI E DUPLEX - STAINLESS STEEL, AUSTENITIC STEEL		
8	Acciai inossidabili di facile lavorabilità Acciai inossidabili automatici Acciai inossidabili trattati al calcio <i>Stainless steel Austenitic 180 HB</i>	
9	Acciai inossidabili di media lavorabilità Acciai inossidabili austenitici e duplex	
10	Acciai inossidabili di difficile lavorabilità Acciai inossidabili austenitici e duplex <i>Stainless steel 230 - 260 HB</i>	
11	Acciai inossidabili di lavorabilità estremamente difficile Acciai inossidabili austenitici e duplex	
GHISA - CAST IRON		
12	Ghise di media durezza Ghise grigie <i>Grey cast iron</i>	
13	Ghise debolmente legate Ghise malleabili Ghise nodulari <i>Modular cast iron</i>	
14	Ghise mediamente legate Ghise malleabili di media lavorabilità Ghise nodulari <i>Malleable cast iron 130 HB</i>	
15	Ghise altamente legate di difficile lavorabilità Ghise malleabili di difficile lavorabilità Ghise nodulari <i>Malleable cast iron 230 HB</i>	
ALTRI MATERIALI - OTHER MATERIALS		
16	Leghe di alluminio: a basso contenuto di Si <i>Aluminium alloys</i>	
17	Leghe di alluminio: ad alto contenuto di Si <i>Aluminium alloys</i>	
18	Leghe di rame <i>Copper, copper alloys</i>	
19	Superleghe a base ferro <i>high temperature alloys</i> <i>Fe Basic</i>	
20	Superleghe a base cobalto <i>Co Basic</i>	
21	Superleghe a base nichel <i>N Basic</i>	
22	Leghe di titanio <i>Titanium, titanium alloys</i>	

GEOMETRIE DEL ROMPITRUCCIOLO

GEOMETRY OF CHIPBREAKER

	F3	La geometria F3 offre la robustezza caratteristica dell'inserto a petto piano di tipo W, tuttavia il suo angolo di taglio elicoidale contribuisce alla riduzione della potenza richiesta dalla macchina. <i>F3 geometry offer the hardness as characteristic of inserts w type. His helical cutting edge let to reduce the power of machining.</i>
	M2	Per lavorazioni di sgrossatura e medie lavorazioni - rompitrucolo adatto per operazioni generali su acciai e acciai inossidabili, uso generico. <i>Suitable for roughing and medium working. Chipbreaker suitable to work steel in general and stainless steel.</i>
	MA	Per media sgrossatura - geometria affilata per acciaio. <i>Suitable for medium roughing. Geometry sharp for steel.</i>
	ME	Per medie lavorazioni - rompitrucolo adatto per operazioni generali su acciai e acciai inossidabili, uso generico. <i>For medium working. chipbreaker suitable for steel and stainless steel. General purpose.</i>
	MF	Per media finitura - geometria affilata per alluminio e leghe. <i>For medium finishing. Geometry sharp for aluminium and alloys.</i>
	RA	Per sgrossatura e finitura - geometria affilata e lappata per alluminio e leghe. <i>For roughing and finishing. Geometry sharp for aluminium and alloys.</i>
	RX	Per sgrossatura e finitura - geometria stampata e affilata per alluminio e leghe. <i>Suitable for roughing and finishing. Geometry imprinted and sharp for aluminium and alloys.</i>
	R1	La conformazione del rompitrucolo lo rende idoneo per la lavorazione di acciai legati o dove vi è richiesta una buona resistenza del filo tagliente. <i>The geometry of chipbreaker is suitable for alloy steel or for working which request good resistance of cutting edge.</i>
	R2	La geometria R2 è stata studiata per operazioni di sgrossatura e semifinitura ed è indicata per lavorare una grande varietà di materiali. Consente un taglio dolce in operazioni di fresatura e migliora il controllo del truciolo rispetto alle altre geometrie elicoidali. <i>This kind of geometry is suitable for roughing and semi-finishing, to work large variety of materials. Let a sweet cutting in milling operations and improve the control of chip, better of helical geometry.</i>
	R3	Per medie lavorazioni e finitura - geometria stampata e affilata per inox e acciai dove necessita molta taglientezza. <i>Suitable for medium working and finishing. Geometry imprinted and sharp for inox and steel. Working which require much cutting.</i>
	R4	Per sgrossatura pesante - geometria stampata per sbancamento stampi. <i>Suitable for strong roughing. Geometry imprinted for working mould.</i>
	R5	Per sgrossatura pesante - geometria stampata per sbancamento stampi. <i>Suitable for strong roughing. Geometry imprinted for working mould.</i>
	TA	Geometria affilata per inserti tangenziali. Inserto usato sulle frese a disco. <i>Geometry sharp for special kind of insert. Used on the disk mill.</i>

RIVESTIMENTO COATING

Legge HMW	Tipo rivestimento	
0FD	PVD	TiAlN + Si
1FD	PVD	TiAlN + Si
1FZ	PVD	Zirc
2FA	PVD	TiAlN
2FC9	CVD	TiCN + Al ₂ O ₃
2FD	PVD	TiAlN+Si
3MC9	CVD	TiCN + Al ₂ O ₃
3MCC	PVD	AlCrN
3MT	PVD	TiN
3MT9	CVD	TiCN + Al ₂ O ₃
4KC9	CVD	TiCN + Al ₂ O ₃
4KCC	PVD	AlCrN

GRADI DI FRESATURA - MILLING GRADES

		0FD	1F	1FD	1FZ	2FA	2FC9	2FD	3MC9	3MCC	3MA	4KC9	4KCC
P	P01												
	P10												
	P20												
	P30												
	P40												
	P50												
M	M01												
	M10												
	M20												
	M30												
	M40												
	M50												
K	K01												
	K10												
	K20												
	K30												
	K40												
N	N01												
	N10												
	N20												
	N30												
S	S01												
	S10												
	S20												
	S30												
H	H01												
	H10												
	H20												
	H30												

SPECIFICHE GRADI DI FRESATURA

SPECIFICATIONS OF MILLING GRADES

0FD	Qualità di metallo duro rivestita in PVD per finitura di ghisa. Offre una lunga durata del tagliente anche in difficili operazioni di finitura superficiale.
1F	Grado di metallo duro non ricoperto a grana molto fine. L'alta resistenza all'usura la rende adatta alla lavorazione dell'alluminio, grazie alla sua preparazione a tagliente vivo. Consigliata per il settore dell'aerospaziale.
1FD	Grado di metallo duro rivestito in PVD adatta a lavorazione di acciai per stampi e acciai pre-temprati, con durezza a partire da 36HRC. E' in grado di gestire gran parte delle esigenze di lavorazione, dalle operazioni di sgrossatura a quelle di finitura. Per lavorazioni in condizioni di stabilità.
1FZ	Grado di metallo duro ultrafine rivestito in PVD-ZRN. Ideale per lavorazioni di alluminio e leghe.
2FA	Grado ricoperto in PVD adatto a lavorazioni di acciaio inossidabile di tipo austenitico. Grado indicato per la sgrossatura di stampi.
2FC9	Qualità di metallo duro rivestita in CVD per ogni tipo di lavorazione, abbina una buona produttività e tenacità. Lavora sia a secco che con lubrificante.
2FD	Grado di metallo duro ricoperto in PVD per fresatura su larga scala, da leggera a pesante (sia a secco che refrigerata) per la lavorazione di acciai non legati e fortemente legati. Ottima scelta nella spianatura e per ottimizzare la produzione nella fresatura di spallamenti.
3MC9	Grado di metallo duro tenace, con rivestimento in CVD, per fresatura di acciai in condizioni instabili. Utilizzabile su lavorazioni di acciai inossidabili a velocità medio-basse.
3MCC	Qualità di metallo duro rivestita in PVD estremamente tenace adatta per la lavorazione di acciai e acciai inossidabili. Si presta per una vasta gamma di applicazioni anche in condizioni da lavoro instabile.
3MA	Grado di metallo duro rivestito in PVD adatto a lavorazioni di sgrossatura, di acciai inossidabili, austenitici e duplex. La sua tenacità consente le lavorazioni di taglio interrotto anche in condizioni difficili.
3MT9	Grado di metallo duro tenace, con rivestimento in CVD, per fresatura di acciai in condizioni instabili. Utilizzabile su lavorazioni di acciai inossidabili a velocità medio-basse.
4KC9	Grado ricoperto in PVD adatto per lavorazioni di sgrossatura di acciai. La grande tenacità del substrato e il rivestimento ad alto spessore garantiscono grande resistenza in condizioni di taglio interrotto e buona resistenza ai colpi. Da utilizzare a velocità di taglio medio basse.
4KCC	Qualità di metallo duro rivestita in PVD estremamente tenace per la lavorazione di acciai e acciai inossidabili. Si presta per una vasta gamma di applicazioni anche in condizioni da lavoro instabile.

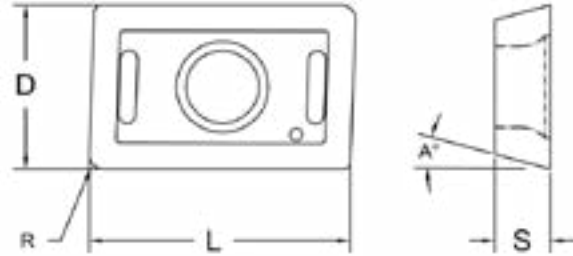
INSERTI - *INSERTS*

INSERTI
INSERTS

INSERTI *Pag. A17*
INSERTS

INSERTI AD ESAURIMENTO *Pag. A70*
INSERTS IN EXHAUSTION

ADMT 15..-M2

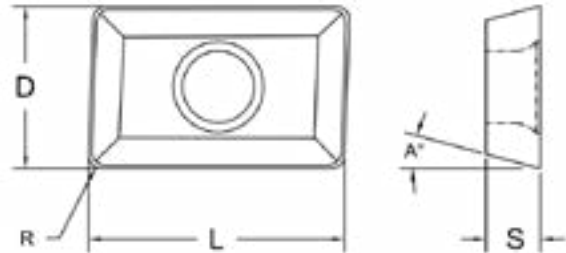


CODE	(mm)					1F	1FD				4KC9
	D	L	S	R	A°			2FD	3MCC		
ADMT 150308 TR M2	9,52	15,00	3,18	0,80	15			✓	✓		

R

- R = SGROSSATURA / ROUGHING
- M = MEDIA / MEDIUM
- F = FINITURA / FINISHING
- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

ADMT 15..-R1

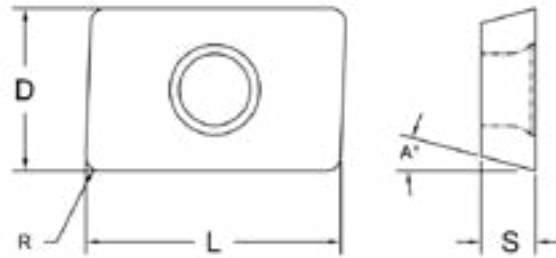


CODE	(mm)					1F	1FD			4KC9
	D	L	S	R	A°			2FD	3MCC	
ADMT 150308 TR R1	9,52	15,00	3,18	0,80	15			✓	✓	

M

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2-4 settimane / 2-4 weeks to delivery

ADMW 15..



CODE	(mm)					1F	1FD			4KC9
	D	L	S	R	A°			2FD	3MCC	
ADMW 150308 FR	9,52	15,00	3,18	0,80	15			✓	✓	
ADMW 150308 TR	9,52	15,00	3,18	0,80	15			✓	✓	
ADMW 150310 TR	9,52	15,00	3,18	1,00	15			✓		
ADMW 150315 TR	9,52	15,00	3,18	1,50	15			✓		
ADMW 150320 TR	9,52	15,00	3,18	2,00	15			✓		
ADMW 150325 TR	9,52	15,00	3,18	2,50	15			✓		
ADMW 150330 TR	9,52	15,00	3,18	3,00	15			✓		
ADMW 150335 TR	9,52	15,00	3,18	3,50	15			✓		
ADMW 150340 TR	9,52	15,00	3,18	4,00	15			✓		

R

R = SGROSSATURA / ROUGHING

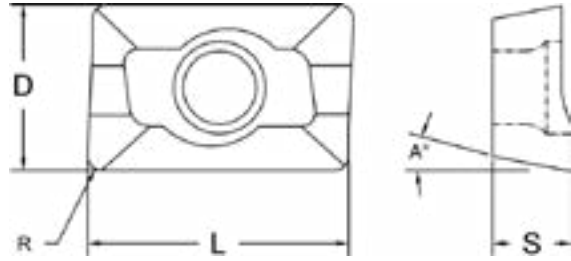
M = MEDIA / MEDIUM

F = FINITURA / FINISHING

✓ = DISPONIBILE / AVAILABLE

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2-4 settimane / 2-4 weeks to delivery

ADXT 16..-ME



CODE	(mm)					1F	2FC9			
	D	L	S	R	A°			2FD	3MCC	4KC9
ADXT 160608 E ME	9,90	17,50	6,15	0,80	15			✓	✓	✓
ADXT 160620 E ME	9,90	17,50	6,15	2,00	15			✓	✓	✓

M F

R = SGROSSATURA / ROUGHING

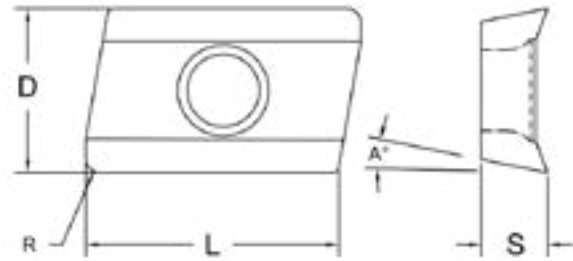
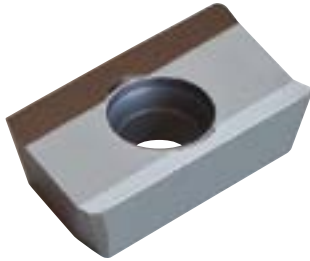
M = MEDIA / MEDIUM

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✓ = DISPONIBILE / AVAILABLE

● = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

APEX 16..-RX



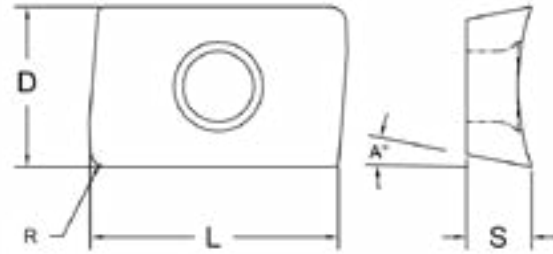
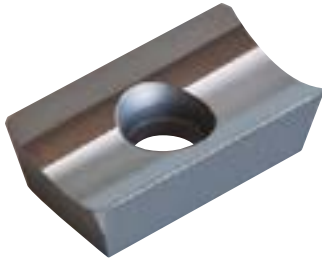
CODE	(mm)					1F	1FZ	2FD	3MCC	4KC9
	D	L	S	R	A°					
APEX 1604PD ER RX	9,52	16,00	4,76	-	11				✓	
APEX 1604PD FR RX	9,52	16,00	4,76	-	11	✓				



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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
AP16CL	A94
AP16CM	A95
AP16F	A90
AP16M	A96
AP16MR	A112
AP16MS	A153
AP16W	A97
AP16WP	A113

APEX 10/16..-RA



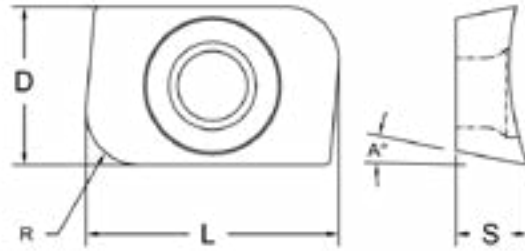
CODE	(mm)									
	D	L	S	R	A°	1F	1FZ	2FD	3MCC	4KC9
APEX 1003PD FR RA	6,70	10,35	318	-	11	✓	•			
APEX 1604PD FL RA	9,52	16,40	4,76	-	11	✓	•			
APEX 1604PD FR RA	9,52	16,40	4,76	-	11	✓	•			



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Frese di riferimento	Pagina
AP10CXL	A89
AP10/16F	A90
AP10M	A91
AP10R	A111
AP10W	A92
AP10WL	A93
AP10/16WP	A113
AP16CL	A94
AP16CM	A95
AP16M	A96
AP16MR	A112
AP16MS	A153
AP16W	A97

APHT 10..-F3



CODE	(mm)					1F	1FD	2FD	3MCC	4KC9
	D	L	S	R	A°					
APHT 100306 ER F3	6,70	10,50	3,50	0,60	11		✓		•	
APHT 100310 ER F3	6,70	10,50	3,50	1,00	11		✓		•	
APHT 100315 ER F3	6,70	10,50	3,50	1,50	11		✓		•	
APHT 100320 ER F3	6,70	10,50	3,50	2,00	11		✓		•	
APHT 100325 ER F3	6,70	10,50	3,50	2,50	11		✓		•	
APHT 100330 ER F3	6,70	10,50	3,50	3,00	11		✓		•	

M F

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Frese di riferimento	Pagina
AP10CXL	A89
AP10F	A90
AP10M	A91
AP10R	A111
AP10W	A92
AP10WL	A93

APHT 10/16..-M2



CODE	(mm)					1F	1FD	2FD	3MCC	4KC9
	D	L	S	R	A°					
APHT 1003PD FR M2	6,70	10	3,49	0,50	11	✓				
APHT 1604PD FR M2	9,50	16,30	5,26	0,90	11	✓				

R M

- R** = SGROSSATURA / ROUGHING
- M** = MEDIA / MEDIUM
- F** = FINITURA / FINISHING
- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
AP10CXL	A89
AP10/16F	A90
AP10M	A91
AP10R	A111
AP10W	A92
AP10WL	A93
AP10/16WP	A113
AP16CL	A94
AP16CM	A95
AP16M	A96
AP16MR	A112
AP16MS	A153
AP16W	A97

APHW 10/16..



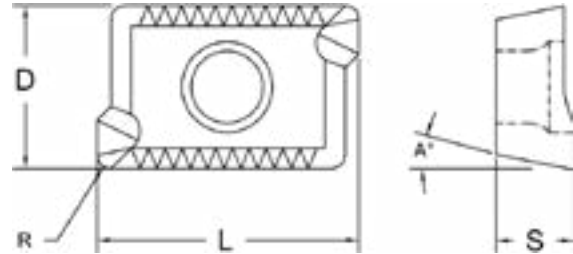
CODE	(mm)					1F	1FD	2FD	3MCC	4KC9
	D	L	S	R	A°					
APHW 1003PD ER	6,70	10,35	3,18	-	11		✓		✓	
APHW 1604PD TR	9,52	16,40	4,76	-	11				✓	
APHW 160415 TR	9,52	16,40	4,76	1,50	11				•	
APHW 160420 TR	9,52	16,40	4,76	2,00	11				✓	
APHW 160425 TR	9,52	16,40	4,76	2,50	11				•	
APHW 160430 TR	9,52	16,40	4,76	3,00	11				✓	
APHW 160435 TR	9,52	16,40	4,76	3,50	11				•	
APHW 160440 TR	9,52	16,40	4,76	4,00	11				•	



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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
AP10CXL	A89
AP10/16F	A90
AP10M	A91
AP10R	A111
AP10W	A92
AP10WL	A93
AP10/16WP	A113
AP16CL	A94
AP16CM	A95
AP16M	A96
AP16MR	A112
AP16MS	A153
AP16W	A97

APKT 10/16..-M2



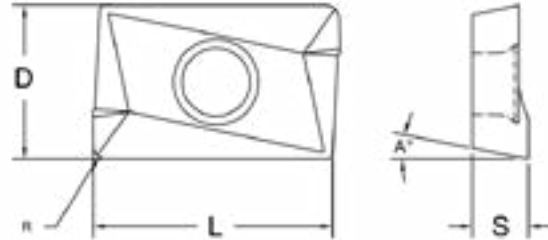
CODE	(mm)					1F	1FD			
	D	L	S	R	A°			2FD	3MCC	3PT9
APKT 1003PD ER M2	6,70	10,00	3,49	-	11			✓	✓	•
APKT 1604PD ER M2	9,52	16,40	5,20	-	11			✓	✓	•



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- M** = MEDIA / MEDIUM
- F** = FINITURA / FINISHING
- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
AP10CXL	A89
AP10/16F	A90
AP10M	A91
AP10R	A111
AP10W	A92
AP10WL	A93
AP10/16WP	A113
AP16CL	A94
AP16CM	A95
AP16M	A96
AP16MR	A112
AP16MS	A153
AP16W	A97

APKT 10/16..-ME



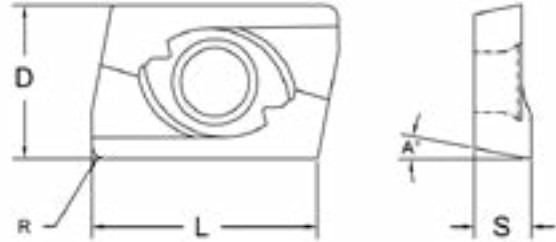
CODE	(mm)					1F				
	D	L	S	R	A°		1FD	2FD	3MCC	3PT9
APKT 1003PD ER ME	6,70	10,50	3,60	-	11		✓	✓	✓	•
APKT 1604PD ER ME	9,52	16,40	5,20	-	11			✓	✓	•

M

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- M** = MEDIA / MEDIUM
- F** = FINITURA / FINISHING
- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
AP10CXL	A89
AP10/16F	A90
AP10M	A91
AP10R	A111
AP10W	A92
AP10WL	A93
AP10/16WP	A113
AP16CL	A94
AP16CM	A95
AP16M	A96
AP16MR	A112
AP16MS	A153
AP16W	A97

AXHT 18..-F3

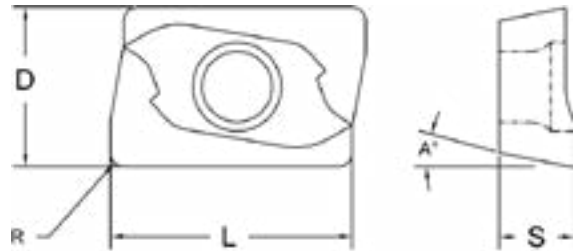


CODE	(mm)					1F	1FD			
	D	L	S	R	A°			2FD	3MCC	4KC9
AXHT 180612 E F3	11,00	16,70	6,30	1,20	15			✓	✓	✓
AXHT 180631 E F3	11,00	16,70	6,30	3,10	15			•	•	•

M F

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2-4 settimane / 2-4 weeks to delivery

AXMT 11..-M2



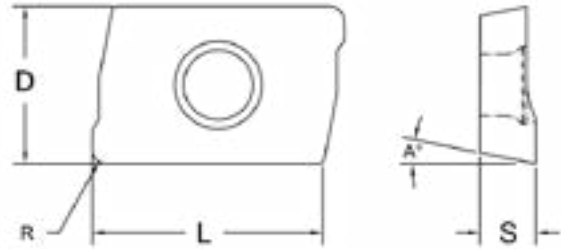
CODE	(mm)					1F	2FC9	2FD		3MCC		4KC9
	D	L	S	R	A°							
AXMT 11T310 E M2	6,80	11,00	3,50	1,00	21			✓		✓		



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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
AX11C	A98
AX11M	A99

AXMT 11/17/18..-ME



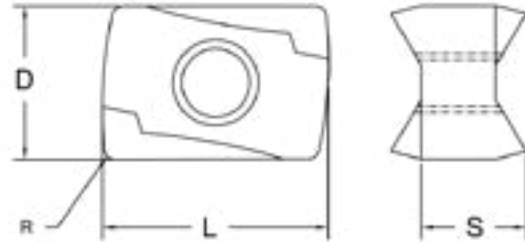
CODE	(mm)					1F				
	D	L	S	R	A°		2FC9	2FD	3MCC	4KC9
AXMT 11T308 E ME	6,80	11,00	3,50	0,80	21		•	✓	✓	✓
AXMT 170408 E ME	9,60	17,00	4,70	0,80	19		•	✓	✓	✓
AXMT 180612 E ME	11,00	16,70	6,35	0,80	15		•	✓	✓	✓

M

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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
AX11C	A98
AX11M	A99

LNGX 13..-M2

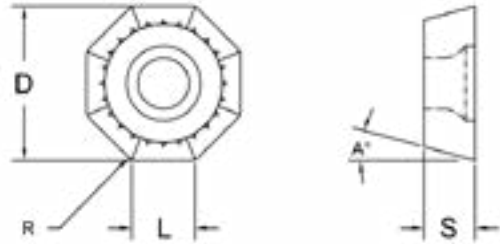


CODE	(mm)					1F	1FD			3MCC
	D	L	S	R	A°			2FD	3MC9	
LNGX 130708 E M2	11,00	13,00	7,79	0,80	0			✓	✓	



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- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

ODHT 05/06..-R2



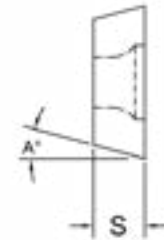
CODE	(mm)									
	D	L	S	R	A°	2FC9	2FD	3MC9	3MCC	4KC9
ODHT 050408X E R2	12,70	5,00	4,76	0,80	15		✓			✓
ODHT 060508X E R2	15,88	6,00	5,56	0,80	15	•	•	✓	✓	

M F

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- F** = FINITURA / FINISHING
- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
OD05M	A119
OD06M	A120

ODHW 05/06..



CODE	(mm)					1F	1FD				3MCC			
	D	L	S	R	A°			2FD				4KC9		
ODHW 050408 TN	12,70	5,00	4,76	0,80	15			✓				•		
ODHW 060508 TN	15,88	6,00	5,56	0,80	15			✓				✓		



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- M** = MEDIA / MEDIUM
- F** = FINITURA / FINISHING
- ✓ = DISPONIBILE / AVAILABLE
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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
OD05M	A119
OD06M	A120

OFEX 05..-R2



CODE	(mm)					1F	1FD	2FD		4KC9		4KCC	
	D	L	S	R	A°			✓	•	✓	•		
OFEX 05T308 E R2	12,70	5,00	3,97	0,80	25			✓	•	✓	•	✓	•

M F

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- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
OF05M	A121

RCKT 12/16...-M2

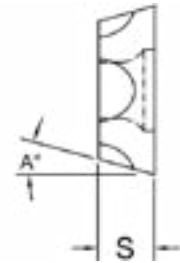
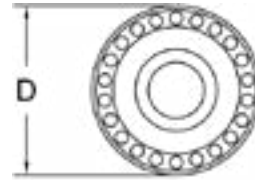


CODE	(mm)					1F	1FD			
	D	L	S	R	A°			2FD	3MCC	4KC9
RCKT 1204MO E M2	12,00	-	4,76	-	7			✓	✓	
RCKT 1606MO S M2	16,00	-	6,35	-	7			✓	✓	•



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- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

RCKT 12/16/20...R4

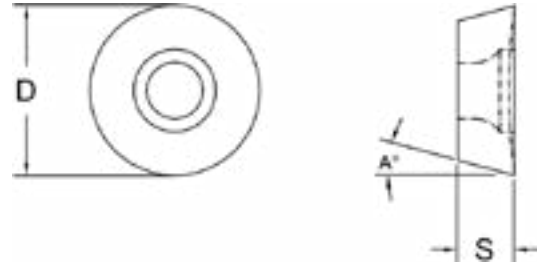


CODE	(mm)					1F	2FC9		2FD		3MC9		3MCC	
	D	L	S	R	A°		•	✓	•	✓	•	✓	•	✓
RCKT 1204MO E R4	12,00	-	4,76	-	7		•	✓	•	✓	•	✓	•	✓
RCKT 1606MO E R4	16,00	-	6,35	-	7		•	✓	•	✓	•	✓	•	✓
RCKT 2006MO E R4	20,00	-	6,35	-	7		•	•	•	•	•	•	•	•

R

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- M** = MEDIA / MEDIUM
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- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

RDHT 10/12..-R1



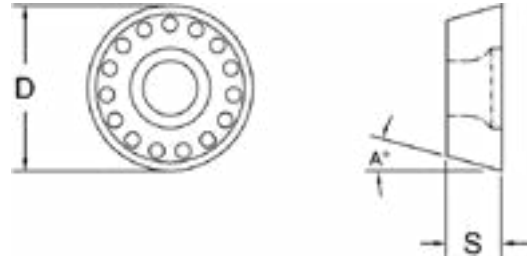
CODE	(mm)					1F	Material Grades				4KC9
	D	L	S	R	A°		1FD	2FD	3MCC		
RDHT 1003MO F R1	10,00	-	3,18	-	15		•				
RDHT 1003MO S R1	10,00	-	3,18	-	15		✓	✓	✓		
RDHT 10T3MO F R1	10,00	-	3,97	-	15		✓				
RDHT 10T3MO S R1	10,00	-	3,97	-	15			✓	✓		
RDHT 12T3MO F R1	12,00	-	3,97	-	15		•				
RDHT 12T3MO E R1	12,00	-	3,97	-	15		•	✓	✓		



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- M** = MEDIA / MEDIUM
- F** = FINITURA / FINISHING
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- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
RD10F	A128
RD10WL	A129
RD12F	A130
RD12M	A131

RDHT 12..-R2



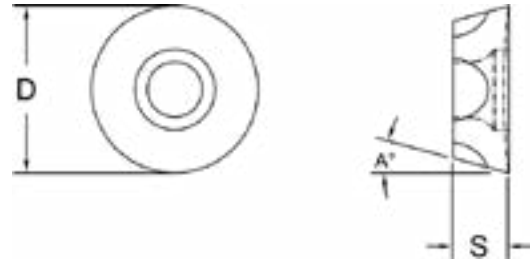
CODE	(mm)					1FD	2FC9		2FD		3MC9		3MCC	
	D	L	S	R	A°									
RDHT 12T3MO S R2	12,00	-	3,97	-	15		•	✓	•	✓				

R M

- R** = SGROSSATURA / ROUGHING
- M** = MEDIA / MEDIUM
- F** = FINITURA / FINISHING
- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
RD12F	A130
RD12M	A131

RDHT 16..-R5



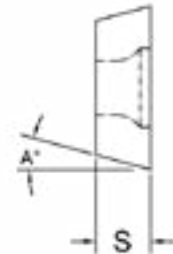
CODE	(mm)					1F	1FD	2FD		
	D	L	S	R	A°				3MC9	3MCC
RDHT 1605MO S R5	16,00	-	5,56	-	15				✓	✓
RDHT 1605MO XS R5	16,00	-	5,56	-	15				•	•



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- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
RD16F	A130
RD16M	A131

RDHW 07/10/12/16..



CODE	(mm)					1F	1FD		2FD		3MC9		3MCC	
	D	L	S	R	A°									
RDHW 0702MO T	7,00	-	2,38	-	15				•					
RDHW 1003MO E	10,00	-	3,18	-	15		•						•	
RDHW 10T3MO T	10,00	-	3,97	-	15				•				•	
RDHW 12T3MO T	12,00	-	3,97	-	15				•					
RDHW 1605MO S	16,00	-	5,56	-	15						✓		✓	



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- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
RD07/10F	A128
RD07/10WL	A129
RD12/16F	A130
RD12/16M	A131

RDMT 16..-R1



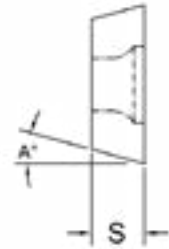
CODE	(mm)					1F	1FD	2FD			3MCC	4KC9	
	D	L	S	R	A°			Blue	Yellow	Red		Blue	Yellow
RDMT 1604MO S R1	16,00	-	4,76	-	15			✓				✓	
RDMT 1605MO S R1	16,00	-	5,56	-	15			✓				✓	



- R** = SGROSSATURA / ROUGHING
- M** = MEDIA / MEDIUM
- F** = FINITURA / FINISHING
- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
RD16F	A130
RD16M	A131

RDMT 16..-R4



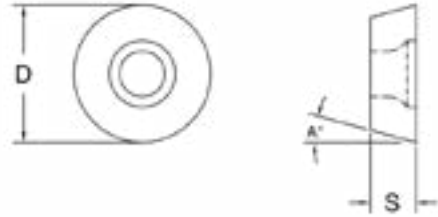
CODE	(mm)					1F	1FD	2FD	3MC9		3MCC	
	D	L	S	R	A°				3MC9	3MCC		
RDMT 1604MO S R4	16,00	-	4,76	-	15				✓	✓		



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- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
RD16F	A130
RD16M	A131

RDMW 10/12/16..



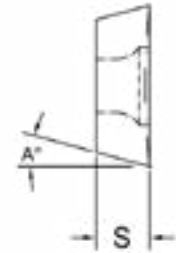
CODE	(mm)					1F	1FD			2FD			3MCC			4KC9
	D	L	S	R	A°		1	2	3	1	2	3	1	2	3	
RDMW 1003MO T	10,00	-	3,18	-	15		✓			✓			•			
RDMW 12T3MO T	12,00	-	3,97	-	15		✓			✓			•			
RDMW 1204MO T	12,00	-	4,76	-	15		✓			✓			•			
RDMW 1604MO T	16,00	-	4,76	-	15		✓			✓			•			



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- M** = MEDIA / MEDIUM
- F** = FINITURA / FINISHING
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- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
RD10F	A128
RD10WL	A129
RD12/16F	A130
RD112/16M	A131
RD124M	A132

RPMT 12..-R1



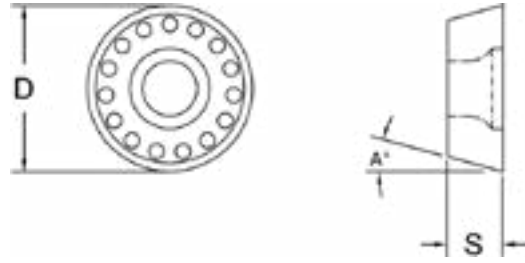
CODE	(mm)					1F	1FD			
	D	L	S	R	A°			2FD	3MCC	4KC9
RPMT 12T3MO S R1	12,00	-	3,97	-	11			✓	✓	•
RPMT 1204MO S R1	12,00	-	4,76	-	11			✓	✓	•



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- M** = MEDIA / MEDIUM
- F** = FINITURA / FINISHING
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- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
RP12M	A133

RPMT 12..-R2



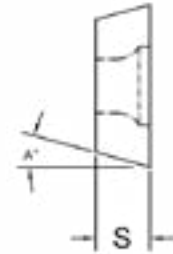
CODE	(mm)					1F	2FC9		2FD		3MC9		3MCC	
	D	L	S	R	A°		•	✓	•	✓	•	✓		
RPMT 1204MO S R2	12,00	-	4,76	-	11		•	✓	•	✓	•	✓		





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- M** = MEDIA / MEDIUM
- F** = FINITURA / FINISHING
- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
RP12M	A133

RPMW 12..



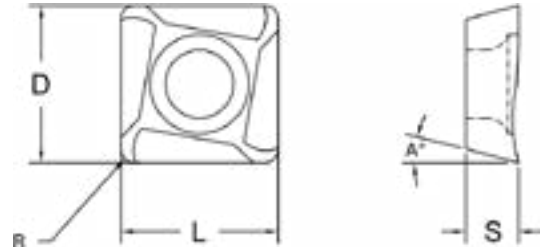
CODE	(mm)					1F	1FD						4KC9
	D	L	S	R	A°			2FD	3MCC				
RPMW 1204MOT	12,00	-	4,76	-	11			✓	✓				

R **M**

- R** = SGROSSATURA / ROUGHING
- M** = MEDIA / MEDIUM
- F** = FINITURA / FINISHING
- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
RP12M	A133

SDHT 12..-ME



CODE	(mm)					1F	1FD			
	D	L	S	R	A°			2FD	3MC9	3MCC
SDHT 120408 E ME	12,70	12,70	4,76	0,80	15			✓	•	✓
SDHT 120420 E ME	12,70	12,70	4,76	2,00	15			✓	•	✓



- R** = SGROSSATURA / ROUGHING
- M** = MEDIA / MEDIUM
- F** = FINITURA / FINISHING
- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
SD12MN	A102

SEHT 12..-R1



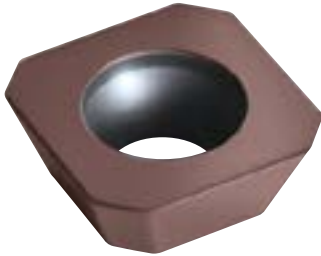
CODE	(mm)					1F	1FD				4KC9
	D	L	S	R	A°			2FD	3MCC		
SEHT 1204AF TN R1	12,70	12,70	4,76	0,80	20			✓	✓		



- R = SGROSSATURA / ROUGHING
- M = MEDIA / MEDIUM
- F = FINITURA / FINISHING
- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
SE12M	A124

SEHW 12/15..



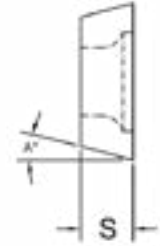
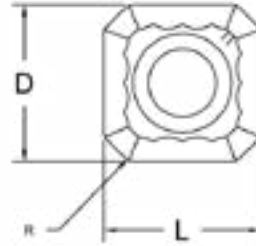
CODE	(mm)					1F				
	D	L	S	R	A°		2FA	2FD	3MC9	3MCC
SEHW 1204AF TN	12,70	12,70	4,76	0,80	20			✓		✓
SEHW 150408 TN	15,88	15,88	4,76	0,80	20		✓	✓		
SEHW 1504AF TN	15,88	15,88	4,76	0,80	20			✓		
SEHW 1505AF SN	15,88	15,88	5,56	0,80	20				✓	•



- R** = SGROSSATURA / ROUGHING
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- ✓ = DISPONIBILE / AVAILABLE
- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
SE12M	A124

SEKT 13..-R1



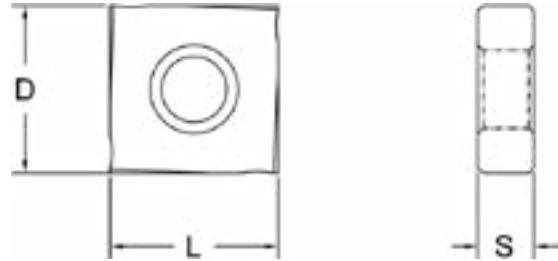
CODE	(mm)									
	D	L	S	R	A°	1F	2FC9	2FD	3MCC	4KC9
SEKT 13T3AG FN R1	13,40	13,40	3,97	-	20	•				
SEKT 13T3AG SN R1	13,40	13,40	3,97	-	20		✓	✓	✓	✓



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- F** = FINITURA / FINISHING
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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
SE13M	A125

SNHX 11/12..-TA



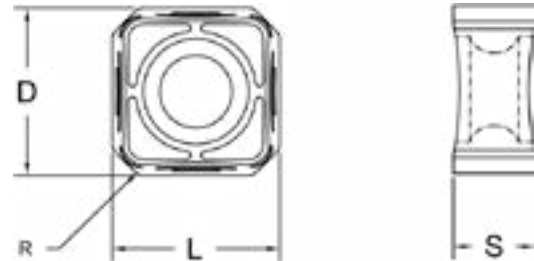
CODE	(mm)					1F	1FD				4KC9
	D	L	S	R	A°			2FD	3MA		
SNHX 1102XX TA	11,00	11,00	2,38	-	-			✓			
SNHX 1103XX TA	11,00	11,00	2,70	-	-			✓			
SNHX 1203XX TA	12,70	12,70	3,18	-	-			✓	•		
SNHX 1204XX TA	12,70	12,70	4,00	-	-			✓	•		
SNHX 12045XX TA	12,70	12,70	4,50	-	-			✓	•		
SNHX 1205XX TA	12,70	12,70	5,40	-	-			✓	•		
SNHX 1207XX TA	12,70	12,70	7,00	-	-			✓	•		

M

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- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
SN11D	A114
SN12D	A115
SN11/12DF	A116
SN11DM	A117
SN12DM	A118

SNMX 12..-M2



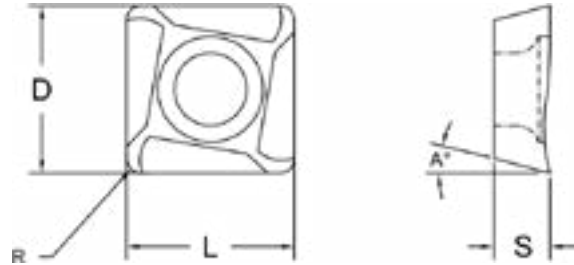
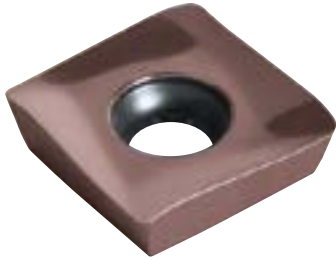
CODE	(mm)					1F	1FD			
	D	L	S	R	A°			2FD	3MCC	4KC9
SNMX 1205 ANN M2	12,70	12,70	6,35	-	-			✓	✓	✓

R **M**

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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
SN12MQ	A127

SOHT 12..-ME



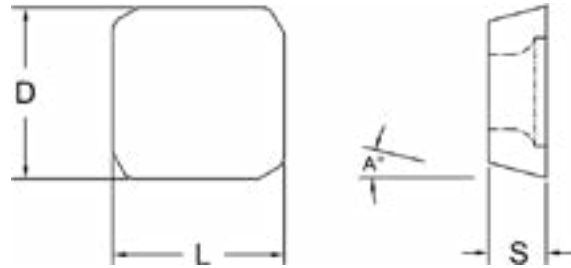
CODE	(mm)					1F	1FD	2FD		4KC9		4KCC	
	D	L	S	R	A°			2FD	4KC9	4KCC			
SOHT 12T308 E ME	12,70	12,70	3,97	0,80	15			✓	•	✓			
SOHT 12T320 E ME	12,70	12,70	3,97	2,00	15			✓	•	•			



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- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
SO12M	A103

SPKN 12/15..



CODE	(mm)					1F	1FD	2FD	3MCC	4KC9
	D	L	S	R	A°					
SPKN 1203ED TL	12,70	12,70	3,18	-	11			✓		
SPKN 1203ED TR	12,70	12,70	3,18	-	11			✓		
SPKN 1504ED TR	15,88	15,88	4,76	-	11			✓		

R

R = SGROSSATURA / ROUGHING

M = MEDIA / MEDIUM

F = FINITURA / FINISHING

✓ = DISPONIBILE / AVAILABLE

● = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

SPMT 12..-M2



CODE	(mm)					1F	1FD			
	D	L	S	R	A°			2FD	3MC9	3MCC
SPMT 120408 SN M2	12,70	12,70	4,76	0,80	11			•	✓	•
SPMT 1204AZ SN M2	12,70	12,70	4,76	-	11			✓		•



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- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

SPMW 12..

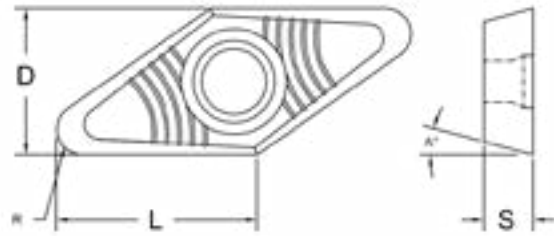


CODE	(mm)					1F	1FD			4KC9
	D	L	S	R	A°			2FD	3MCC	
SPMW 1204ED E	12,70	12,70	4,76	-	11			✓	•	
SPMW 1204ED T	12,70	12,70	4,76	-	11			✓	•	
SPMW 120408 T	12,70	12,70	4,76	0,80	11			•	✓	



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2-4 settimane / 2-4 weeks to delivery

VCGT 22..-RX



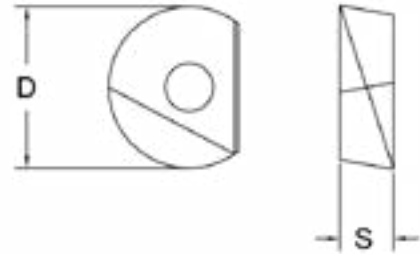
CODE	(mm)									
	D	L	S	R	A°	1F	1FZ	2FD	3MCC	4KC9
VCGT 220530 F RX	12,70	22,10	5,56	3,00	7	✓	•			



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- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
VC22F	A134
VC22M	A135

WAR..



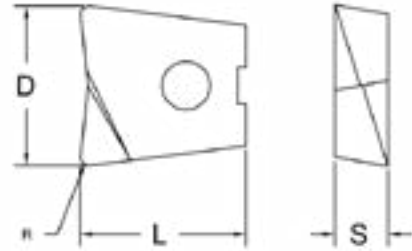
CODE	(mm)									
	D	L	S	R	A°	0FD	1FD	2FD	3MCC	4KC9
WAR 12	12,00	-	3,00	-	-	✓	•			
WAR 16	16,00	-	4,00	-	-	✓	•			
WAR 20	20,00	-	5,00	-	-	✓	•			
WAR 25	25,00	-	6,00	-	-	✓	•		✓	
WAR 32	32,00	-	7,00	-	-	✓	•		✓	

M F

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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
WARC	A136

WPB.. CF



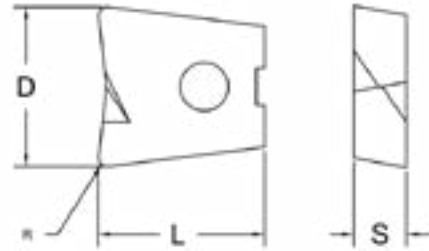
CODE	(mm)								2FD	3MCC	4KC9
	D	L	S	R	A°	0FD	1FD				
WPB 1005 CF	10,00	-	2,50	0,50	-	✓	•				
WPB 1010 CF	10,00	-	2,50	1,00	-	✓	•				
WPB 1210 CF	12,00	-	2,50	1,00	-	✓	•				
WPB 1610 CF	16,00	-	3,00	1,00	-	✓	•				
WPB 1613 CF	16,00	-	3,00	1,30	-	✓	•				
WPB 2010 CF	20,00	-	3,00	1,00	-	✓	•				
WPB 2016 CF	20,00	-	3,00	1,60	-	✓	•				
WPB 2520 CF	25,00	-	5,00	2,00	-	✓	•				

M F

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- = RICHIESTA / REQUEST
2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
WPBVC	A139
WPBVCD	A140
WPBVF	A141

WPB.. N



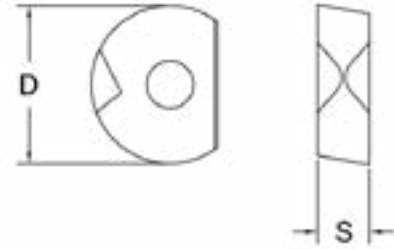
CODE	(mm)								2FD	3MCC	4KC9
	D	L	S	R	A°	0FD	1FD				
WPB 0805 N	8,00	-	2,00	0,50	-	✓	•				
WPB 0810 N	8,00	-	2,00	1,00	-	✓	•				
WPB 1005 N	10,00	-	2,50	0,50	-	✓	•				
WPB 1010 N	10,00	-	2,50	1,00	-	✓	•				
WPB 1210 N	12,00	-	2,50	1,00	-	✓	•				
WPB 1610 N	16,00	-	3,00	1,00	-	✓	•				
WPB 1613 N	16,00	-	3,00	1,30	-	✓	•				
WPB 2010 N	20,00	-	3,00	1,00	-	✓	•				
WPB 2016 N	20,00	-	3,00	1,60	-	✓	•				
WPB 2520 N	25,00	-	4,00	2,00	-	✓	•				



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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
WPBVC	A139
WPBVCD	A140
WPBVF	A141

WPR..



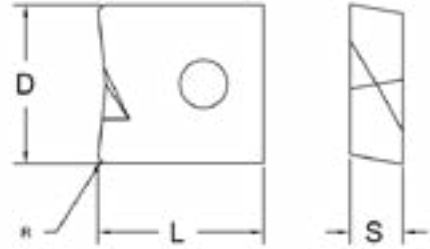
CODE	(mm)										
	D	L	S	R	A°	0FD	1FD	2FD	3MCC	4KC9	
WPR 08	8,00	-	2,00	-	-	✓	•				
WPR 10	10,00	-	2,50	-	-	✓	•				
WPR 12	12,00	-	2,50	-	-	✓	•				
WPR 16	16,00	-	3,00	-	-	✓	•				
WPR 20	20,00	-	3,00	-	-	✓	•				
WPR 25	25,00	-	4,00	-	-	✓	•		✓		
WPR 32	32,00	-	5,00	-	-	✓	•		✓		

M F

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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
WPRC	A142
WPRCD	A143
WPRCM	A144
WPRF	A145

WPV.. N



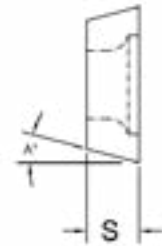
CODE	(mm)								2FD	3MCC	4KC9
	D	L	S	R	A°	OFD	1FD				
WPV 0806 N	8,00	9,50	2,00	0,60	-	✓	•				
WPV 1008 N	10,00	11,50	2,50	0,80	-	✓	•				
WPV 1210 N	12,00	14,00	2,50	1,00	-	✓	•				
WPV 1613 N	16,00	16,00	3,00	1,30	-	✓	•				
WPV 2016 N	20,00	18,00	3,00	1,60	-	✓	•				
WPV 2520 N	25,00	23,50	4,00	2,00	-	✓	•				



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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
WPBVC	A139
WPBVCD	A140
WPBVF	A141

XDHX 04/06/10..



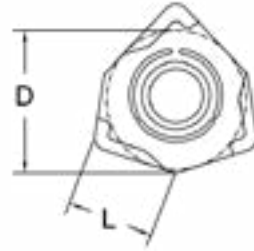
CODE	(mm)					1F	1FD	2FD	3MCC	4KC9
	D	L	S	R	A°					
XDHX 040110 E	4,00	4,00	1,59	1,00	15		✓			
XDHX 060205 E	6,50	6,90	2,38	0,50	15		✓			
XDHX 060210 E	6,50	6,90	2,38	1,00	15		✓			
XDHX 10T310 E	10,00	10,65	3,97	1,00	15		✓			




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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
XD 04/06/10F90	A146
XD 04/06/10F95	A147

XNEX 04/08..-M2

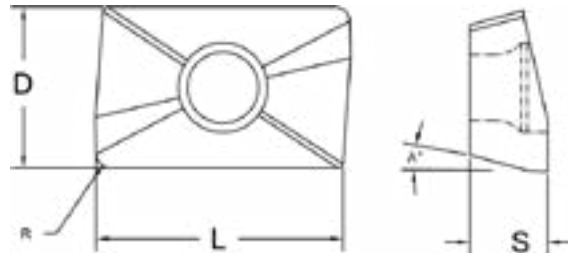


CODE	(mm)					1F	1FD			4KC9
	D	L	S	R	A°			2FD	3MCC	
XNEX 040304 E M2	6,73	4,41	3,31	0,40	0			✓	✓	
XNEX 080608 E M2	12,50	7,50	6,56	0,80	0			✓	✓	



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2-4 settimane / 2-4 weeks to delivery

XOHX 12..-R2



CODE	(mm)					1F				
	D	L	S	R	A°		2FC9	2FD	3MCC	4KC9
XOHX 120408 E R2	8,18	12,00	4,00	0,80	14		✓	✓	✓	✓
XOHX 120412 E R2	8,18	12,00	4,00	1,20	14			✓	•	
XOHX 120416 E R2	8,18	12,00	4,00	1,60	14			✓	•	
XOHX 120420 E R2	8,18	12,00	4,00	2,00	14			✓	•	
XOHX 120408 T R2	8,18	12,00	4,00	0,80	14		✓	✓	✓	✓



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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
XO12C	A108
XO12F	A109
XO12M	A110

XOMX 09..-M2



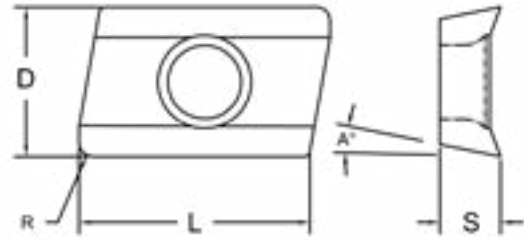
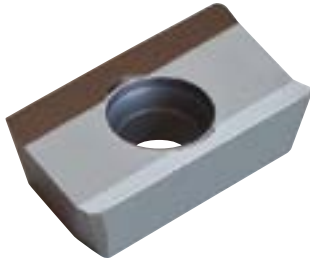
CODE	(mm)					1F	1FD			
	D	L	S	R	A°			2FD	3MC9	3MCC
XOMX 090308 E M2	6,35	10,80	3,65	0,80	15			✓	•	✓
XOMX 090316 E M2	6,35	10,50	3,65	1,60	15			✓	✓	✓



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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
XO09C/CL	A105
XO09F	A106
XO09M	A107

XPHT 16..-R2

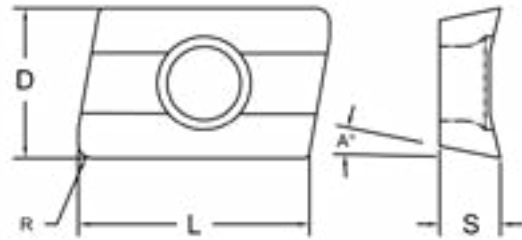
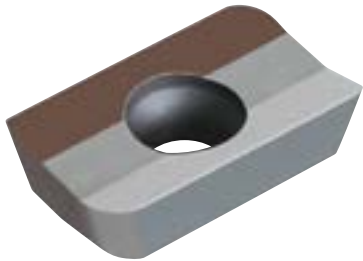


CODE	(mm)					1F	1FD	2FD	3MCC	4KCC	
	D	L	S	R	A°						
XPHT 1604PD ER R2	9,80	16,00	4,76	-	11						✓
XPHT 1604PD FR R2	9,80	16,00	4,76	-	11	✓					
XPHT 160412 FR R2	9,80	16,00	4,76	1,20	11	✓					
XPHT 160416 FR R2	9,80	16,00	4,76	1,60	11	✓					
XPHT 160420 FR R2	9,80	16,00	4,76	2,00	11	✓					
XPHT 160425 FR R2	9,80	16,00	4,76	2,50	11	✓					
XPHT 160432 FR R2	9,80	16,00	4,76	3,20	11	✓					



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- ✓ = DISPONIBILE / AVAILABLE
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2-4 settimane / 2-4 weeks to delivery

XPHT 16..-R3



FRESATURA - MILLING

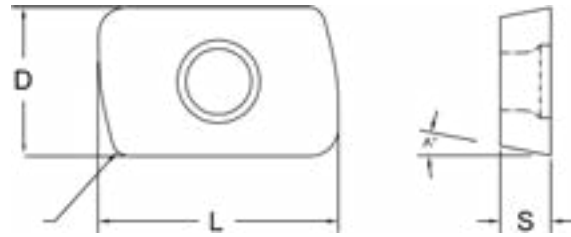
INSERTI - INSERTS

CODE	(mm)					1F	1FD			
	D	L	S	R	A°			2FD	3MCC	4KC9
XPHT 1604PD ER R3	9,52	16,00	4,76	-	11			✓	•	
XPHT 160412 ER R3	9,52	16,00	4,76	1,20	11			✓	•	
XPHT 160416 ER R3	9,52	16,00	4,76	1,60	11			✓	•	
XPHT 160420 ER R3	9,52	16,00	4,76	2,00	11			✓	•	
XPHT 160425 ER R3	9,52	16,00	4,76	2,50	11			✓	•	
XPHT 160432 ER R3	9,52	16,00	4,76	3,20	11			✓	•	

M F

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2-4 settimane / 2-4 weeks to delivery

XPHW 10..



CODE	(mm)					1F	1FD	2FD	3MCC	4KC9
	D	L	S	R	A°					
XPHW 100312 S	6,35	10,00	3,18	1,20	11		✓		✓	




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2-4 settimane / 2-4 weeks to delivery

Frese di riferimento	Pagina
XP10F	A148

ADKT 15..-ME



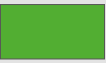

CODE	(mm)					1F	1FD				4KC9
	D	L	S	R	A°			2FD	3MCC		
ADKT 1505PD ER ME	9,65	15,75	5,60	1,00	15			✓	✓		



Frese di riferimento	Pagina
AD15M	A87
AD15W	A88

ADMT 15..-MA



CODE	(mm)						1FD				4KC9
	D	L	S	R	A°			2FD	3MCC		
ADMT 150308 FR MA	9,52	15,00	3,18	0,80	15	•					
ADMT 150308 TR MA	9,52	15,00	3,18	0,80	15			•	•		



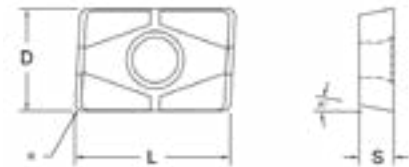
ADMW 15..IR



CODE	(mm)					1F	1FD				3MCC	4KC9
	D	L	S	R	A°			2FD				
ADMW 150308 ER IR	9,52	15,00	3,18	0,80	15			✓				
ADMW 150310 ER IR	9,52	15,00	3,18	1,00	15			✓				
ADMW 150315 ER IR	9,52	15,00	3,18	1,50	15			✓				
ADMW 150320 ER IR	9,52	15,00	3,18	2,00	15			✓				
ADMW 150325 ER IR	9,52	15,00	3,18	2,50	15			✓				
ADMW 150330 ER IR	9,52	15,00	3,18	3,00	15			✓				
ADMW 150335 ER IR	9,52	15,00	3,18	3,50	15			✓				
ADMW 150340 ER IR	9,52	15,00	3,18	4,00	15			✓				



APFT 16..-R1



CODE	(mm)					1F	1FD				3MCC	4KC9
	D	L	S	R	A°			2FD				
APFT 1604PD ER R1	9,52	16,40	4,76	-	11			✓		✓		



Frese di riferimento	Pagina	Frese di riferimento	Pagina
AP16CL	A94	AP16MR	A112
AP16CM	A95	AP16MS	A153
AP16F	A90	AP16W	A97
AP16M	A96	AP16WP	A113

APHT 10/16..-MA



CODE	(mm)					1F	Color Legend				4KC9
	D	L	S	R	A°		1FD	2FD	3MCC		
APHT 1003PD ER MA	6,70	10,50	3,18	-	11		✓		•		
APHT 1604PD TR MA	9,52	16,40	4,76	-	11			✓	•		

M F

Frese di riferimento	Pagina	Frese di riferimento	Pagina
AP10CLX	A89	AP16MR	A112
AP10M	A91	AP16MS	A153
AP10R	A111	AP16W	A97
AP16CL	A94	AP10WL	A93
AP16CM	A95	AP10/16F	A90
AP16M	A96	AP10/16WP	A113

APHT 16..-R2

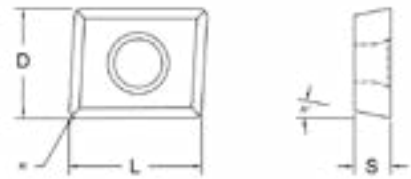


CODE	(mm)					1F	Color Legend			4KC9
	D	L	S	R	A°		2FC9	2FD	3MCC	
APHT 1604 ER R2	9,52	16,40	4,76	-	11		•	✓	•	

M F

Frese di riferimento	Pagina	Frese di riferimento	Pagina
AP16CL	A94	AP16MR	A112
AP16CM	A95	AP16MS	A153
AP16F	A90	AP16W	A97
AP16M	A96	AP16WP	A113

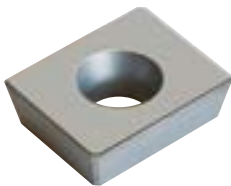
APLT 15..-R1



CODE	(mm)					1F	1FD	2FD	3MCC			4KC9
	D	L	S	R	A°				Blue	Yellow	Red	
APLT 150412 E R1	12,70	15,88	4,76	-	11				✓			



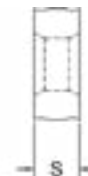
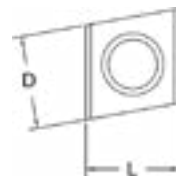
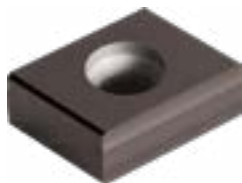
APLW 15/20..



CODE	(mm)					1F	1FD	2FD			3MCC		4KC9
	D	L	S	R	A°			Blue	Yellow	Red	Blue	Yellow	
APLW 1504ZZ FR	12,70	15,88	4,76	-	11			✓					
APLW 1504ZZ TR	12,70	15,88	4,76	-	11					✓			
APLW 2004ZZ FR	12,70	20,00	4,76	-	11			✓					
APLW 2004ZZTR	12,70	20,00	4,76	-	11					✓			



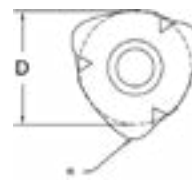
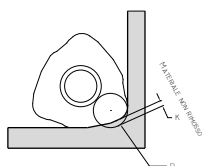
CNHX 10/13/16..-TA



CODE	(mm)					1F	1FD	2FD			4KC9
	D	L	S	R	A°				3MA	4KC9	
CNHX 10M5 STA	10,00	10,00	5,40	-	90				✓		
CNHX 13M5 STA	12,70	10,00	5,40	-	90				✓		
CNHX 16M6 STA	16,00	12,00	6,40	-	90				✓		



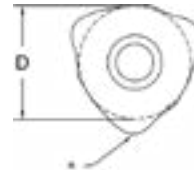
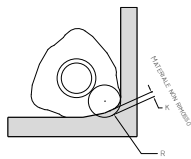
JDMT 12/14..-R1




CODE	(mm)					1F	1FD				4KC9
	D	L	S	R	A°			2FD	3MCC	4KC9	
JDMT 120420 ZD SR R1	12,00	-	4,76	2,00	15			✓	✓		
JDMT 140520 ZD SR R1	14,00	-	5,56	2,00	15			✓	✓		



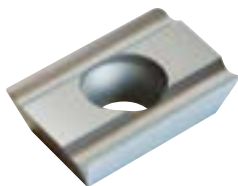
JDMW 12/14..




CODE	(mm)					1F	1FD			4KC9
	D	L	S	R	A°			2FD	3MCC	
JDMW 120420 ZD SR	12,00	-	4,76	2,00	15			✓	✓	
JDMW 120420 ZD SRX	12,00	-	4,76	2,00	15			•	•	
JDMW 140520 ZD SR	14,00	-	5,56	2,00	15			✓	✓	



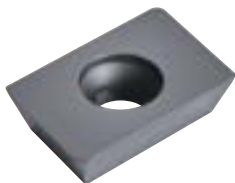
LECT 18..-MA



CODE	(mm)					1F	1FD			4KC9
	D	L	S	R	A°			2FD	3MCC	
LECT 180410 MA	12,70	19,00	4,76	1,00	20			•		



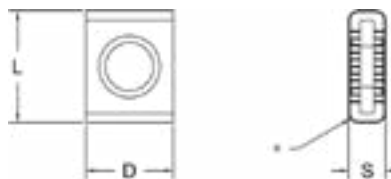
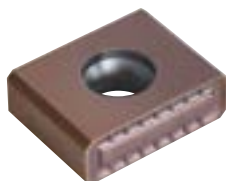
LECW 18..



CODE	(mm)					1F	1FD	2FD			3MCC		4KC9
	D	L	S	R	A°			Blue	Yellow	Red	Blue	Yellow	
LECW 180410 T	12,70	19,00	4,76	1,00	20			•		✓			



LNGT 19..XX..-R4




CODE	(mm)					1F	1FD			2FD	3MCC		4KC9
	D	L	S	R	A°		Blue	Red	Grey		Blue	Yellow	
LNGT 1906 XX E R4	14,35	19,00	6,35	-	90		✓				•		



OFHN 07..




CODE	(mm)					1F	1FD					3MCC	4KC9
	D	L	S	R	A°			2FD	3MCC	4KC9			
OFHN 070412 TN	18,00	7,40	4,76	1,20	25			•					



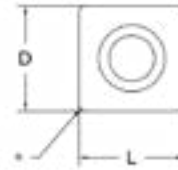
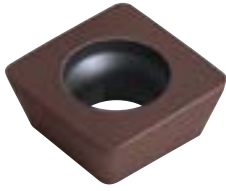
OFHR 07..-ME



CODE	(mm)					1F	1FD					3MCC	4KC9
	D	L	S	R	A°			2FD	3MCC	4KC9			
OFHR 070408 EN ME	18,00	7,40	4,76	0,80	25			•					
OFHR 070412 EN ME	18,00	7,40	4,76	1,20	25			•					



SDHW 09/12..

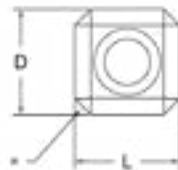
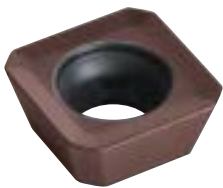


CODE	(mm)					1F	1FD			4KC9
	D	L	S	R	A°			2FD	3MCC	
SDHW 09T308 E	9,52	9,52	3,97	0,80	15			✓	✓	
SDHW 09T3AE TN	9,52	9,52	3,97	-	15			✓	✓	
SDHW 120412 TN	12,70	12,70	4,76	1,20	15			✓	✓	
SDHW 1204AE TN	12,70	12,70	4,76	-	15			✓	✓	



Frese di riferimento	Pagina
SD09C	A100
SD09MN	A101
SD12MN	A102

SDXT 09..-M2/R3

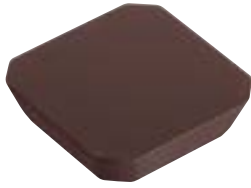


CODE	(mm)						1FD			4KC9
	D	L	S	R	A°			2FD	3MCC	
SDXT 09T308 EN M2	9,52	9,52	3,97	0,80	15			✓		
SDXT 09T308 EN R3	9,52	9,52	3,97	0,80	15				✓	
SDXT 09T308 FN R3	9,52	9,52	3,97	0,80	15	✓				
SDXT 09T3AE EN M2	9,52	9,52	3,97	-	15			✓		
SDXT 09T3AE EN R3	9,52	9,52	3,97	-	15				✓	
SDXT 09T3AE FN R3	9,52	9,52	3,97	-	15	✓				



Frese di riferimento	Pagina
SD09C	A100
SD09MN	A101

SEHN 12/15..



CODE	(mm)					1F	1FD			
	D	L	S	R	A°			2FD	3MCC	4KC9
SEHN 1203AF TN	12,70	12,70	3,18	-	20			✓	•	
SEHN 1204AF TN	12,70	12,70	4,76	-	20			✓	•	
SEHN 1504AF TN	15,88	15,88	4,76	-	20			•	✓	

M F

Frese di riferimento	Pagina
SEH12M	A126

SEHR 12..-R2

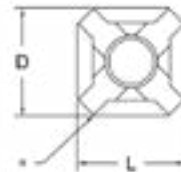


CODE	(mm)					1F	1FD			
	D	L	S	R	A°			2FD	3MCC	4KC9
SEHR 1203AF TN R2	12,70	12,70	3,18	-	20			✓		
SEHR 1204AF TN R2	12,70	12,70	4,76	-	20			✓		

R

Frese di riferimento	Pagina
SEH12M	A126

SEKT 13..-R2



CODE	(mm)					1F				
	D	L	S	R	A°		2FC9	2FD	3MCC	4KC9
SEKT 13T3AG SN R2	13,40	13,40	3,97	-	20		•	✓	✓	✓



Utensile di riferimento	Pagina
SE13M	A125

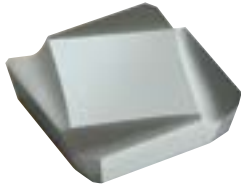
SNMQ 15..-R4



CODE	(mm)					1F	1FD			
	D	L	S	R	A°			2FA	3MA	4KC9
SNMQ 150850 E R4	15,88	15,88	8,00	5,00	-			✓	✓	



SPKR 12..-MF



CODE	(mm)									
	D	L	S	R	A°	1F	1FZ	2FD	3MCC	4KC9
SPKR 1203ED FR MF	12,70	12,70	3,18	-	11	✓	•			



TEHN 22..



CODE	(mm)									
	D	L	S	R	A°	1F	1FD	2FD	3MCC	4KC9
TEHN 2204PE TR	22,00	12,70	4,76	-	20			•	✓	
TEHN 2205PE ER	22,00	12,70	5,56	-	20			•	✓	



TPKN 16/22..



CODE	(mm)					1F	1FD				4KC9
	D	L	S	R	A°			2FD	3MCC		
TPKN 1603PD TR	9,52	16,00	3,18	-	11			•	✓		
TPKN 2204PD TR	12,70	22,00	4,76	-	11			•	✓		



Frese di riferimento

TP16/22M

Pagina

A104

TPKR 16..-MF



CODE	(mm)							2FD	3MCC	4KC9
	D	L	S	R	A°	1F	1FZ			
TPKR 1603PD FR MF	9,52	16,00	3,18	-	11	✓	•			



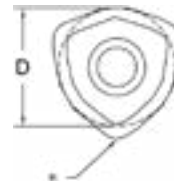
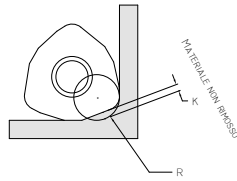
Frese di riferimento

TP16M

Pagina

A104

WPMT 06/08..-M2

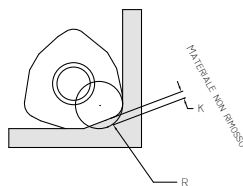


CODE	(mm)					1F	1FD				4KC9
	D	L	S	R	A°			2FD	3MCC		
WPMT 06X415 ZSR M2	9,52	-	4,20	1,50	11			✓	✓		
WPMT 080615 ZSR M2	12,70	-	6,35	1,50	11			✓	✓		



Frese di riferimento	Pagina
WP06F	A137
WP08M	A138

WPMW 06/08..



CODE	(mm)					1F	1FD				4KC9
	D	L	S	R	A°			2FD	3MCC		
WPMW 06X415 ZSR	9,52	-	4,20	1,50	11			✓	✓		
WPMW 080615 ZSR	12,70	-	6,35	1,50	11			✓	✓		



Frese di riferimento	Pagina
WP06F	A137
WP08M	A138

FRESATURA - MILLING

FRESE *MILLING*

FRESE PER SPALLAMENTO (90°) *Pag. A87*
SHOULDER MILLING CUTTERS (90°)

ELIFRESE, FRESE FORANTI, FRESE PER SCANALATURA *Pag. A111*
HELICAL, GROOVING AND DRILLING MILLING CUTTERS

FRESE PER SPIANATURA *Pag. A119*
FACE MILLING CUTTERS

FRESE PER COPIATURA *Pag. A128*
COPY MILLING CUTTERS

LAMATURA, ALESATURA, SMUSSI *Pag. A149*
SPOT FACING, BORING AND CHAMFERING MILLING CUTTERS

SPALLAMENTO

SHOULDER

ATTACCO A MANICOTTO

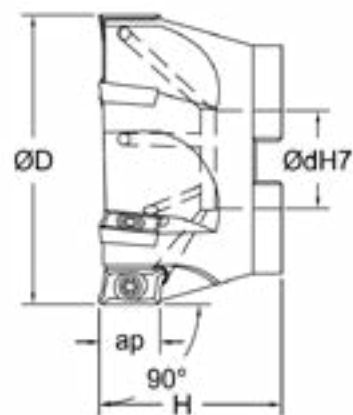
SHELL SHANK

FORI DI LUBRIFICAZIONE

INTERNAL COOLANT



AD15M



CODE	Ø D	L	Ø dh7	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AD15M40Z4	40	45	16	4	VT70/75	TX15	ADKT..1505..
AD15M50Z5	50	40	22	5	VT70/75	TX15	ADKT..1505..
AD15M63Z6	63	40	22	6	VT70/75	TX15	ADKT..1505..
AD15M80Z7	80	50	27	7	VT70/75	TX15	ADKT..1505..
AD15M100Z8	100	50	32	8	VT70/75	TX15	ADKT..1505..

INSERTI DI RIFERIMENTO

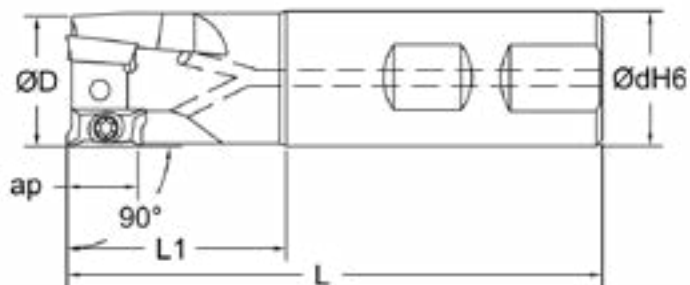


ADKT 15.-ME
Pag. A70



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

AD15W



CODE	Ø D	L1	L	Ø dh6	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AD15W25Z2	25	44	100	25	2	VT70/75	TX15	ADKT..1505..
AD15W32Z3	32	50	110	32	3	VT70/75	TX15	ADKT..1505..
AD15W40Z4	40	45	115	32	4	VT70/75	TX15	ADKT..1505..

INSERTI DI RIFERIMENTO



ADKT 15.-ME
Pag. A70



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

SERIE EXTRA LUNGA ATTACCO CILINDRICO
 EXTRALONG SERIES PARALLEL SHANK
 FORI DI LUBRIFICAZIONE
 INTERNAL COOLANT

SPALLAMENTO
 SHOULDER



AP10CXL



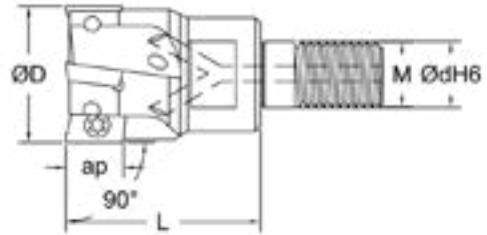
CODE	ØD	L1	L	Ø dh6	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AP10CXL16Z2-15	16	24	200	15	10	2	VT15	TX08	AP..1003..
AP10CXL16Z2	16	24	200	16	10	2	VT15	TX08	AP..1003..
AP10CXL20Z3-19	20	25	200	19	10	3	VT15	TX08	AP..1003..
AP10CXL20Z3	20	25	200	20	10	3	VT15	TX08	AP..1003..
AP10CXL25Z3-24	25	25	200	24	10	3	VT15	TX08	AP..1003..
AP10CXL25Z3	25	25	200	25	10	3	VT15	TX08	AP..1003..
AP10CXL25Z4-24	25	25	200	24	10	4	VT15	TX08	AP..1003..
AP10CXL25Z4	25	25	200	25	10	4	VT15	TX08	AP..1003..

INSERTI DI RIFERIMENTO



RICHIESTA / REQUEST
 3/4 giorni / 3/4 days to delivery

AP10/16F



FRESATURA - MILLING

FRESE PER SPALLAMENTO (90°) - SHOULDER MILLING CUTTERS (90°)

CODE	Ø D	L1	M	Ø dh6	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AP10F16Z2	16	25	8	8,5	10	2	VT15	TX08	AP..1003..
AP10F20Z3	20	30	10	10,5	10	3	VT15	TX08	AP..1003..
AP10F25Z4	25	35	12	12,5	10	4	VT15	TX08	AP..1003..
AP10F32Z5	32	43	16	17	10	5	VT15	TX08	AP..1003..
AP16F25Z2	25	35	12	12,5	16	2	VT75	TX15	AP..1604..
AP16F32Z3	32	43	16	17	16	3	VT75	TX15	AP..1604..

INSERTI DI RIFERIMENTO

 APEX 10/16.-RA Pag. A22	 APEX 16.-RX Pag. A21	 APFT 16.-R1 Pag. A71	 APHT 10.-F3 Pag. A23	 APHT 10/16.-MA Pag. A72
 APHT 16.-R2 Pag. A72	 APHW 10/16.- Pag. A25	 APKT 10/16.-M2 Pag. A26	 APKT 10/16.-ME Pag. A27	



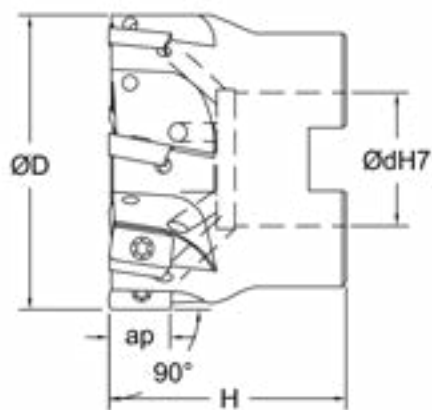
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO A MANICOTTO
SHELL SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SPALLAMENTO
SHOULDER



AP10M



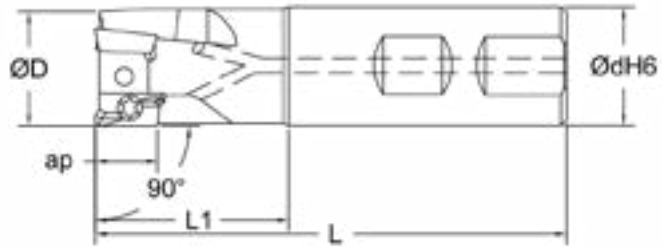
CODE	Ø D	H	Ø dh7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AP10M40Z6	40	40	22	10	6	VT15	TX08	AP..1003..
AP10M50Z7	50	40	22	10	7	VT15	TX08	AP..1003..
AP10M63Z8	63	40	22	10	8	VT15	TX08	AP..1003..
AP10M80Z11	80	50	27	10	11	VT15	TX08	AP..1003..

INSERTI DI RIFERIMENTO				
 APEX 10.-RA Pag. A22	 APHT 10.-F3 Pag. A23	 APHT 10.-MA Pag. A72	 APHT 10.-M2 Pag. A24	 APHW 10.- Pag. A25
 APKT 10.-M2 Pag. A26	 APKT 10.-ME Pag. A27			



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

AP10W



CODE	Ø D	L1	L	Ø dh6	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AP10W10Z1	10	24	80	16	10	1	VT15	TX08	AP..1003..
AP10W12Z1	12	24	80	16	10	1	VT15	TX08	AP..1003..
AP10W14Z1	14	24	80	16	10	1	VT15	TX08	AP..1003..
AP10W16Z2	16	25	85	16	10	2	VT15	TX08	AP..1003..
AP10W17Z2	17	25	85	16	10	2	VT15	TX08	AP..1003..
AP10W20Z3	20	25	90	20	10	3	VT15	TX08	AP..1003..
AP10W22Z3	22	25	90	20	10	3	VT15	TX08	AP..1003..
AP10W24Z3	24	25	95	25	10	3	VT15	TX08	AP..1003..
AP10W25Z3	25	25	95	25	10	3	VT15	TX08	AP..1003..
AP10W25Z4	25	25	95	25	10	4	VT15	TX08	AP..1003..
AP10W32Z5	32	26	95	25	10	5	VT15	TX08	AP..1003..

INSERTI DI RIFERIMENTO

 APEX 10.-RA Pag. A22	 APHT 10.-F3 Pag. A23	 APHT 10.-MA Pag. A72	 APHT 10.-M2 Pag. A24	 APHW 10.- Pag. A25
 APKT 10.-M2 Pag. A26	 APKT 10.-ME Pag. A27			



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

AP10WL



CODE	ØD	L1	L	Ø dh6	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AP10WL10Z1	10	24	150	16	10	1	VT15	TX08	AP..1003..
AP10WL12Z1	12	24	150	16	10	1	VT15	TX08	AP..1003..
AP10WL16Z2	16	24	150	16	10	2	VT15	TX08	AP..1003..
AP10WL20Z3	20	25	150	20	10	3	VT15	TX08	AP..1003..
AP10WL25Z4	25	25	150	20	10	4	VT15	TX08	AP..1003..
AP10WL32Z5	32	26	150	25	10	5	VT15	TX08	AP..1003..

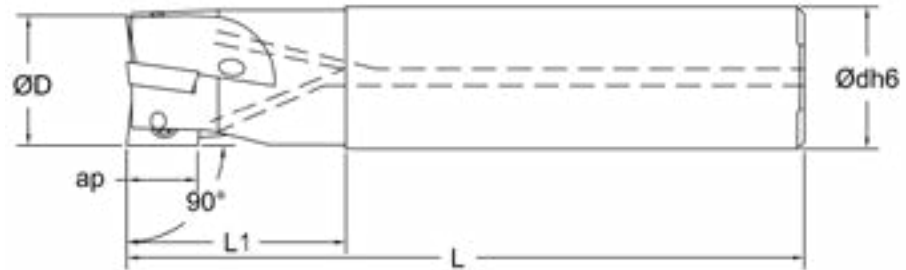
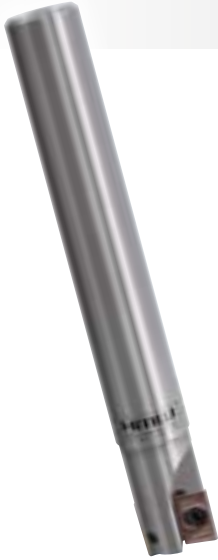
INSERTI DI RIFERIMENTO

 APEX 10..-RA Pag. A22	 APHT 10..-F3 Pag. A23	 APHT 10..-MA Pag. A72	 APHT 10..-M2 Pag. A24	 APHW 10.. Pag. A25
 APKT 10..-M2 Pag. A26	 APKT 10..-ME Pag. A27			



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

AP16CL



CODE	Ø D	L1	L	Ø dh6	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AP16CL25Z2	25	60	180	20	16	2	VT75	TX15	AP.1604..
AP16CL32Z3-25	32	60	180	25	16	3	VT75	TX15	AP.1604..
AP16CL32Z3	32	60	180	32	16	3	VT75	TX15	AP.1604..

INSERTI DI RIFERIMENTO

 APEX 16.-RX Pag. A21	 APEX 16.-RA Pag. A22	 APFT 16.-R1 Pag. A71	 APHT 16.-MA Pag. A72	 APHT 16.-R2 Pag. A72
 APHW 16.. Pag. A25	 APKT 16.-M2 Pag. A26	 APKT 16.-ME Pag. A27		



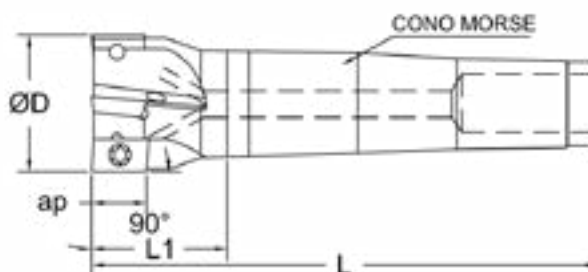
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO CONO MORSE
MORSE SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SPALLAMENTO
SHOULDER



AP16CM



CODE	ØD	L1	L	CONO MORSE	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AP16CM3Z3	32	40	125	CM3	16	3	VT15	TX15	AP..1604..
AP16CM4Z4	40	48	157	CM4	16	4	VT15	TX15	AP..1604..

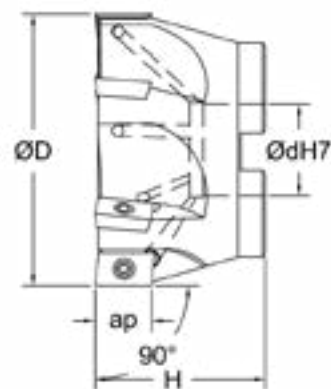
INSERTI DI RIFERIMENTO

 APEX 16..-RX Pag. A21	 APEX 16..-RA Pag. A22	 APFT 16..-R1 Pag. A71	 APHT 16..-MA Pag. A72	 APHT 16..-R2 Pag. A72
 APHW 16.. Pag. A25	 APKT 16..-M2 Pag. A26	 APKT 16..-ME Pag. A27		



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

AP16M



FRESATURA - MILLING

FRESE PER SPALLAMENTO (90°) - SHOULDER MILLING CUTTERS (90°)

CODE	Ø D	H	Ø dh7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AP16M40Z4	40	40	16	16	4	VT75	TX08	AP..1604..
AP16M50Z5	50	40	22	16	5	VT75	TX08	AP..1604..
AP16M63Z5	63	40	22	16	5	VT75	TX08	AP..1604..
AP16M63Z6	63	40	22	16	6	VT75	TX08	AP..1604..
AP16M80Z6	80	50	27	16	6	VT75	TX08	AP..1604..
AP16M100Z7	100	50	32	16	7	VT75	TX08	AP..1604..
AP16M125Z8	125	63	40	16	8	VT75	TX08	AP..1604..
AP16M160Z10	160	63	40	16	10	VT75	TX08	AP..1604..

INSERTI DI RIFERIMENTO

 APEX 16.-RX Pag. A21	 APEX 16.-RA Pag. A22	 APFT 16.-R1 Pag. A71	 APHT 16.-MA Pag. A72	 APHT 16.-R2 Pag. A72
 APHW 16.. Pag. A25	 APKT 16.-M2 Pag. A26	 APKT 16.-ME Pag. A27		



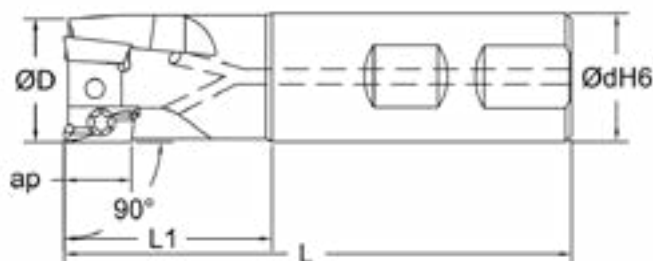
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO WELDON
WELDON SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SPALLAMENTO
SHOULDER



AP16W



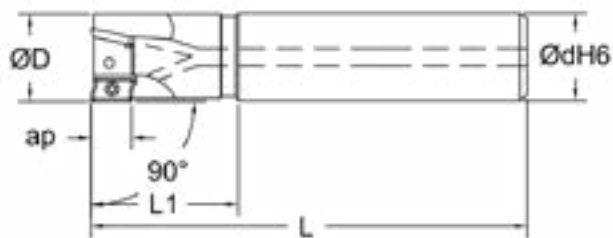
CODE	Ø D	L1	L	Ø dh6	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AP16W25Z2	25	44	100	25	16	2	VT75	TX15	AP.1604..
AP16W28Z3	28	44	100	25	16	3	VT75	TX15	AP.1604..
AP16W32Z3	32	50	110	32	16	3	VT75	TX15	AP.1604..
AP16W40Z4	40	45	115	32	16	4	VT75	TX15	AP.1604..

INSERTI DI RIFERIMENTO				
 APEX 16..-RX Pag. A21	 APEX 16..-RA Pag. A22	 APFT 16..-R1 Pag. A71	 APHT 16..-MA Pag. A72	 APHT 16..-R2 Pag. A72
 APHW 16.. Pag. A25	 APKT 16..-M2 Pag. A26	 APKT 16..-ME Pag. A27		



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

AX11C



FRESATURA - MILLING

FRESE PER SPALLAMENTO (90°) - SHOULDER MILLING CUTTERS (90°)

CODE	ØD	L1	L	Ø dh6	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AX11C16Z2	16	25	100	16	10	2	VT15	TX08	AX..11T30..
AX11C20Z3	20	25	110	20	10	3	VT15	TX08	AX..11T30..
AX11C25Z3	25	32	120	25	10	3	VT15	TX08	AX..11T30..
AX11C32Z3	32	40	130	32	10	3	VT15	TX08	AX..11T30..

INSERTI DI RIFERIMENTO



AXMT 11..-M2
Pag. A29



AXMT 11..-ME
Pag. A30



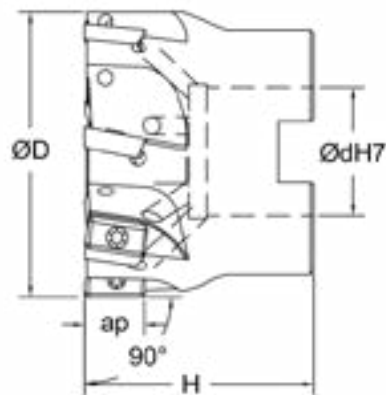
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO A MANICOTTO
SHELL SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SPALLAMENTO
SHOULDER



AX11M



CODE	ØD	H	Ø dh7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AX11M40Z4	40	40	16	10	4	VT15	TX08	AX..11T3..
AX11M50Z5	50	40	22	10	5	VT15	TX08	AX..11T3..
AX11M63Z6	63	40	22	10	6	VT15	TX08	AX..11T3..
AX11M80Z7	80	50	27	10	7	VT15	TX08	AX..11T3..

INSERTI DI RIFERIMENTO



AXMT 11..-M2
Pag. A29

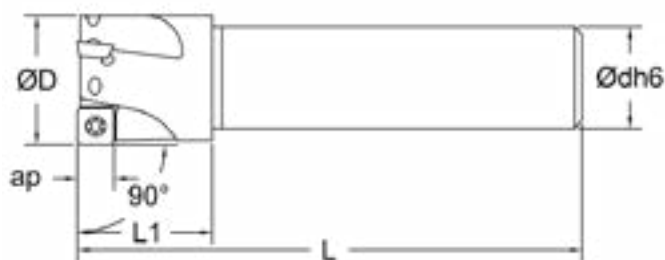


AXMT 11..-ME
Pag. A30



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

SD09C



CODE	Ø D	L1	L	Ø dh6	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SD09C32Z3	32	40	100	25	3	VT45	TX15	SD..09T3..

INSERTI DI RIFERIMENTO



SDHW 09..
Pag. A78



SDXT 09..-M2/R3
Pag. A78



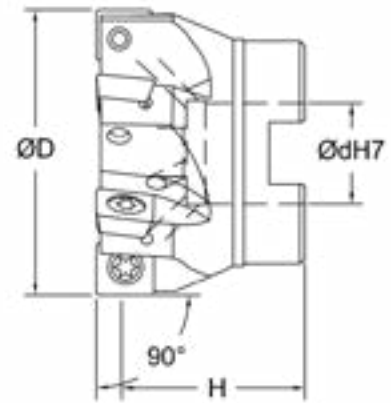
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO A MANICOTTO
SHELL SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SPALLAMENTO
SHOULDER



SD09MN



CODE	Ø D	H	Ø dh7	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SD09MN40Z4	40	40	16	4	VT45	TX15	SD..09T3..
SD09MN40Z5	40	40	16	5	VT45	TX15	SD..09T3..
SD09MN50Z5	50	40	22	5	VT45	TX15	SD..09T3..
SD09MN63Z6	63	40	22	6	VT45	TX15	SD..09T3..

INSERTI DI RIFERIMENTO



SDHW 09..
Pag. A78



SDXT 09..-M2/R3
Pag. A78



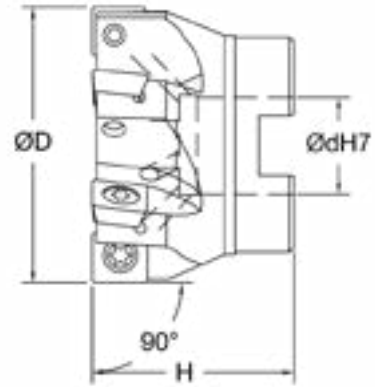
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

A101

FRESATURA - MILLING

FRESE PER SPALLAMENTO (90°) - SHOULDER MILLING CUTTERS (90°)

SD12MN



FRESATURA - MILLING

FRESE PER SPALLAMENTO (90°) - SHOULDER MILLING CUTTERS (90°)

CODE	Ø D	H	Ø dh7	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SD12MN50Z5	50	40	22	5	VT72	TX20	SD..1204..
SD12MN63Z6	63	40	22	6	VT72	TX20	SD..1204..
SD12MN80Z6	80	50	27	6	VT72	TX20	SD..1204..
SD12MN100Z8	100	50	32	8	VT72	TX20	SD..1204..
SD12MN125Z9*	125	63	40	9	VT72	TX20	SD..1204..

INSERTI DI RIFERIMENTO

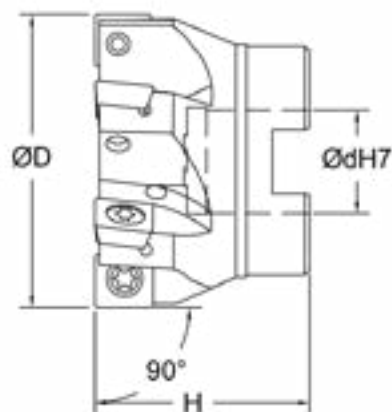


SDHT 12.-ME
Pag. A47



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

SO12M



CODE	Ø D	H	Ø dh7	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SO12M50Z4	50	40	22	4	VT35	TX15	SO..12T3..
SO12M63Z5	63	40	22	5	VT35	TX15	SO..12T3..
SO12M80Z6	80	50	27	6	VT35	TX15	SO..12T3..

INSERTI DI RIFERIMENTO

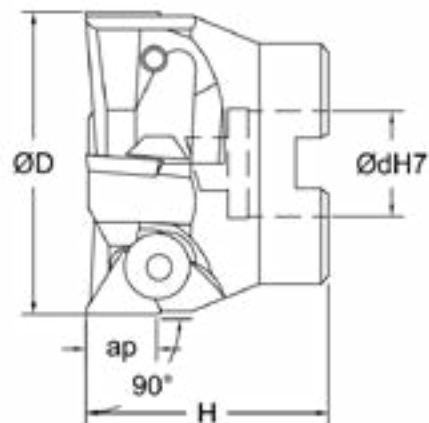


SOHT 12.-ME
Pag. A53



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

TP16/22M



FRESATURA - MILLING

FRESE PER SPALLAMENTO (90°) - SHOULDER MILLING CUTTERS (90°)

CODE	Ø D	H	Ø dh7	ap	Z	VITE FISSAGGIO LOCK WASHER	CHIAVE ESAGONO HEZAGONAL KEY	INSERTO INSERT
TP16M50Z3	50	50	22	16	3	VT14R	mm 4	TP..1603..
TP16M63Z4	63	50	22	16	4	VT14R	mm 4	TP..1603..
TP16M80Z5	80	50	27	16	5	VT14R	mm 4	TP..1603..
TP16M100Z6	100	50	32	16	6	VT14R	mm 4	TP..1603..
TP16M125Z6	125	63	40	16	6	VT14R	mm 4	TP..1603..

CODE	Ø D	H	Ø dh7	ap	Z	VITE FISSAGGIO LOCK WASHER	CHIAVE ESAGONO HEZAGONAL KEY	INSERTO INSERT
TP22M63Z3	63	50	22	20	3	VT18R	mm 5	TP..2204..
TP22M80Z4	80	50	27	20	4	VT18R	mm 5	TP..2204..
TP22M100Z5	100	50	32	20	5	VT18R	mm 5	TP..2204..
TP22M125Z6	125	63	40	20	6	VT18R	mm 5	TP..2204..
TP22M160Z7	160	63	40	20	7	VT18R	mm 5	TP..2204..

INSERTI DI RIFERIMENTO

 TPKN 16/22..
 Pag. A82

 TPKR 16..MF
 Pag. A82

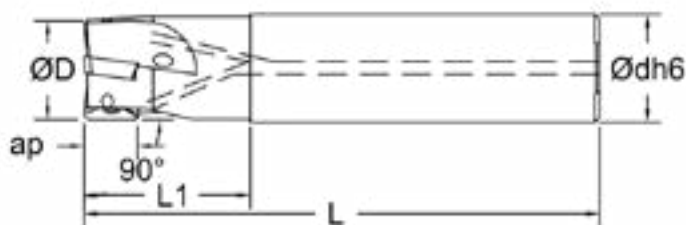
 RICHIESTA / REQUEST
 3/4 giorni / 3/4 days to delivery

GAMBO CILINDRICO
STRAIGHT SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SPALLAMENTO
SHOULDER



XO09C/CL



CODE	Ø D	L1	L	Ø dh6	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
XO09C16Z2	16	30	135	16	8	2	F2505T	TX7	X0..0903..
XO09C20Z2	20	35	150	20	8	2	F2505T	TX7	X0..0903..
XO09C20Z3	20	35	150	20	8	3	F2505T	TX7	X0..0903..
XO09C25Z3	25	40	170	25	8	3	F2505T	TX7	X0..0903..
XO09C25Z4	25	40	170	25	8	4	F2505T	TX7	X0..0903..
XO09C32Z3	32	40	195	32	8	3	F2505T	TX7	X0..0903..
XO09C32Z5	32	40	195	32	8	5	F2505T	TX7	X0..0903..
XO09CL16Z2-15	16	26,5	160	15	8	2	F2505T	TX7	X0..0903..
XO09CL20Z2-20	20	30	200	19	8	2	F2505T	TX7	X0..0903..
XO09CL25Z3-24	25	30	200	24	8	3	F2505T	TX7	X0..0903..

INSERTI DI RIFERIMENTO

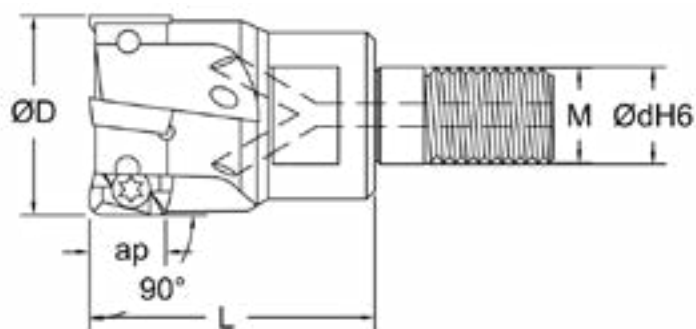


XOMX 09..-M2
Pag. A66



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

XO09F



FRESATURA - MILLING

FRESE PER SPALLAMENTO (90°) - SHOULDER MILLING CUTTERS (90°)

CODE	Ø D	Ø dh6	L	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
XO09F16Z2	16	8,5	23	2	F2505T	TX7	XO..0903..
XO09F20Z3	20	10,5	30	3	F2505T	TX7	XO..0903..
XO09F25Z4	25	12,5	35	4	F2505T	TX7	XO..0903..
XO09F32Z5	32	17	42	5	F2505T	TX7	XO..0903..

INSERTI DI RIFERIMENTO



XOMX 09.-M2
Pag. A66



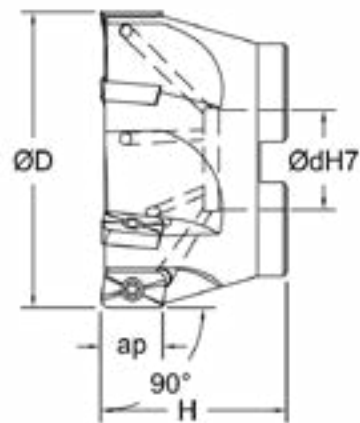
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO A MANICOTTO
SHELL SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SPALLAMENTO
SHOULDER



XO09M



CODE	ØD	H	Ø dh7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
XO09M40Z4	40	40	16	8	4	F2505T	TX7	XO..0903..
XO09M40Z6	40	40	16	8	5	F2505T	TX7	XO..0903..
XO09M50Z5	50	40	22	8	6	F2505T	TX7	XO..0903..
XO09M50Z7	50	40	22	8	7	F2505T	TX7	XO..0903..S

INSERTI DI RIFERIMENTO

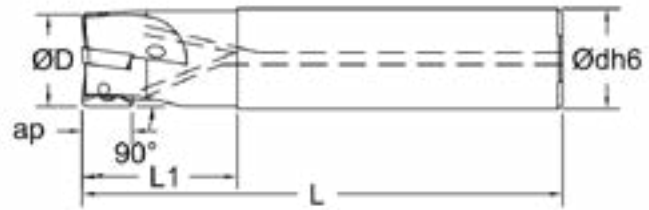
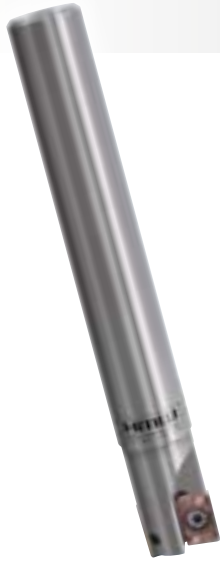


XOMX 09.-M2
Pag. A66



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

XO12C



CODE	Ø D	L1	L	Ø dh6	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
XO12C20Z2	20	30	150	20	11	2	VT45	TX15	XO..1204..
XO1220Z2-19	20	30	150	19	11	2	VT45	TX15	XO..1204..
XO12C25Z2	25	35	170	25	11	2	VT45	TX15	XO..1204..
XO12C25Z2-24	25	35	170	24	11	2	VT45	TX15	XO..1204..
XO12C25Z3	25	35	170	25	11	3	VT45	TX15	XO..1204..

INSERTI DI RIFERIMENTO



XOHX 12.-R2
Pag. A65



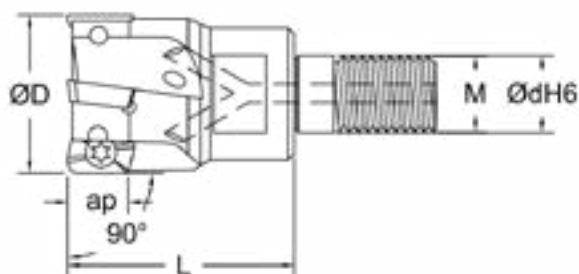
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO FILETTATO
SCREW THREAD SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SPALLAMENTO
SHOULDER



XO12F



CODE	Ø D	M	Ø dh6	L	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
XO12F20Z2	20	10	10,50	47	11	2	VT45	TX15	XO..1204..
XO12F25Z3	25	12	12,50	52	11	3	VT45	TX15	XO..1204..
XO12F32Z3	32	16	17	64	11	3	VT45	TX15	XO..1204..
XO12F32Z4	32	16	17	64	11	4	VT45	TX15	XO..1204..
XO12F40Z4	40	16	17	64	11	4	VT45	TX15	XO..1204..
XO12F40Z5	40	16	17	64	11	5	VT45	TX15	XO..1204..

INSERTI DI RIFERIMENTO

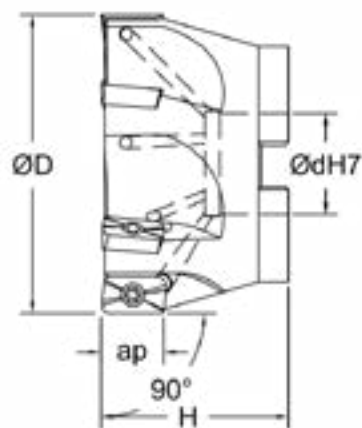


XOHX 12.-R2
Pag. A65



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

XO12M



FRESATURA - MILLING

FRESE PER SPALLAMENTO (90°) - SHOULDER MILLING CUTTERS (90°)

CODE	Ø D	H	Ø dh7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
XO12M40Z4	40	40	16	11	4	VT45	TX15	XO..1204..
XO12M40Z5	40	40	16	11	5	VT45	TX15	XO..1204..
XO12M50Z5	50	40	22	11	5	VT45	TX15	XO..1204..
XO12M50Z7	50	40	22	11	7	VT45	TX15	XO..1204..
XO12M63Z6	63	40	27	11	6	VT45	TX15	XO..1204..
XO12M63Z8	63	40	27	11	8	VT45	TX15	XO..1204..
XO12M80Z7	80	50	27	11	7	VT45	TX15	XO..1204..
XO12M100Z8	100	50	32	11	8	VT45	TX15	XO..1204..

INSERTI DI RIFERIMENTO



XOHX 12.-R2
Pag. A65



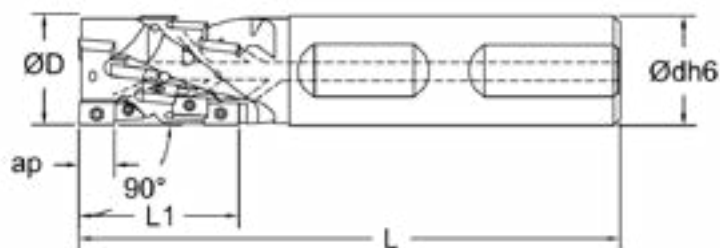
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO WELDON
WELDON SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

ELIFRESE
HELICAL MILLING CUTTERS



AP10R



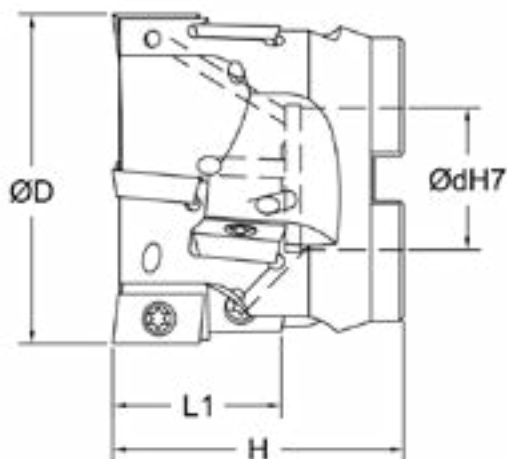
CODE	Ø D	L1	L	Ø dh6	Z	N°INSERTI/ INSERT	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AP10R25Z2X4	25	36	100	25	2	8	VT15	TX08	AP..1003..
AP10R32Z3X5	32	45	120	32	3	15	VT15	TX08	AP..1003..

INSERTI DI RIFERIMENTO				
 APEX 10..-RA Pag. A22	 APHT 10..-F3 Pag. A23	 APHT 10..-MA Pag. A72	 APHT 10..-M2 Pag. A24	 APHW 10.. Pag. A25
 APKT 10..-M2 Pag. A26	 APKT 10..-ME Pag. A27			



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

AP16MR



CODE	Ø D	L1	H	Ø dh7	Z	N°INSERTI/ INSERT	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AP16MR50Z4X2	50	30	55	27	4	8	VT75	TX15	AP..1604..
AP16MR50Z3X3	50	44	70	27	3	9	VT75	TX15	AP..1604..
AP16MR63Z4X2	63	30	55	27	4	8	VT75	TX15	AP..1604..
AP16MR63Z4X3	63	44	60	27	4	12	VT75	TX15	AP..1604..
AP16MR63Z5X2	63	30	55	27	5	10	VT75	TX15	AP..1604..
AP16MR80Z4X2	80	30	55	32	4	8	VT75	TX15	AP..1604..
AP16MR80Z5X3	80	44	60	32	5	15	VT75	TX15	AP..1604..

INSERTI DI RIFERIMENTO

 APEX 16..RX Pag. A21	 APEX 16..RA Pag. A22	 APFT 16..R1 Pag. A71	 APHT 16..MA Pag. A72	 APHT 16..R2 Pag. A72
 APHW 16.. Pag. A25	 APKT 16..-M2 Pag. A26	 APKT 16..-ME Pag. A27		



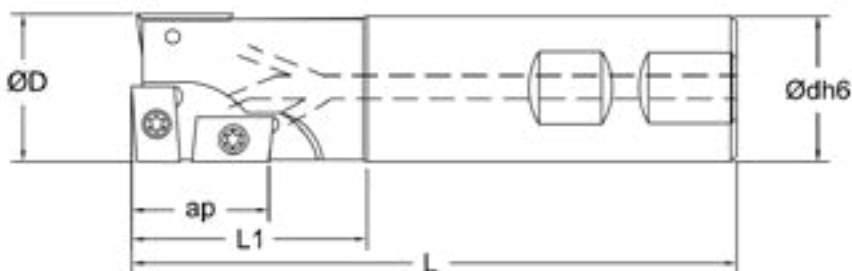
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO WELDON
WELDON SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

FRESE FORANTI
DRILLING MILLING CUTTERS



AP10/16WP



CODE	Ø D	ap	L1	L	Ø dh6	Z	N°INSERTI/ INSERT	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AP10WP20Z2	20	17	35	90	20	2	3	VT15	TX08	AP..1003..
AP16WP32Z2	32	30	50	130	32	2	3	VT75	TX08	AP..1604..

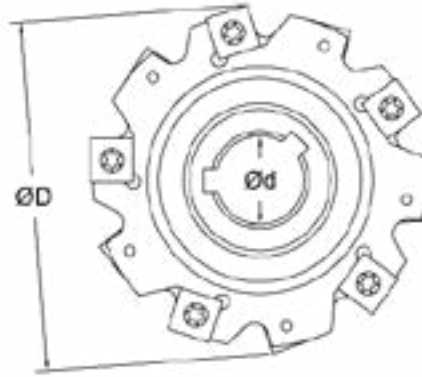
INSERTI DI RIFERIMENTO

 APEX 10/16..-RA Pag. A22	 APEX 16..-RX Pag. A21	 APFT 16..-R1 Pag. A71	 APHT 10..-F3 Pag. A23	 APHT 10/16..-MA Pag. A72
 APHT 16..-R2 Pag. A72	 APHW 10/16.. Pag. A25	 APKT 10/16..-M2 Pag. A26	 APKT 10/16..-ME Pag. A27	



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

SN11D



FRESATURA - MILLING

ELIFRESE, FRESE FORANTI, FRESE PER SCALATURA - HELICAL, GROOVING AND DRILLING CUTTERS

CODE	ØD	Ød	h	b	E	Z	K	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SN11D6304Z8	63	22	14	4	8	8	4	VTX35	TX9	SNHX..1102..
SN11D6305Z8	63	22	14	5	8	8	4	VTX35A	TX9	SNHX..1103..
SN11D8004Z10	80	22	22	4	8	10	5	VTX35	TX9	SNHX..1102..
SN11D8005Z10	80	22	22	5	8	10	5	VTX35A	TX9	SNHX..1103..
SN11D10004Z12	100	27	25	4	12	12	6	VTX35	TX9	SNHX..1102..
SN11D10005Z12	100	27	25	5	12	12	6	VTX35A	TX9	SNHX..1103..
SN11D12504Z12	125	40	31	4	12	12	6	VTX35	TX9	SNHX..1102..
SN11D12505Z12	125	40	31	5	12	12	6	VTX35A	TX9	SNHX..1103..
SN11D16004Z18	160	40	44	4	12	18	9	VTX35	TX9	SNHX..1102..
SN11D16005Z18	160	40	44	5	12	18	9	VTX35A	TX9	SNHX..1103..
SN11D20004Z18	200	50	62	4	12	18	9	VTX35	TX9	SNHX..1102..
SN11D20005Z18	200	50	62	5	12	18	9	VTX35A	TX9	SNHX..1103..

INSERTI DI RIFERIMENTO

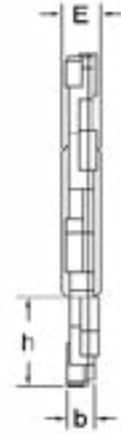
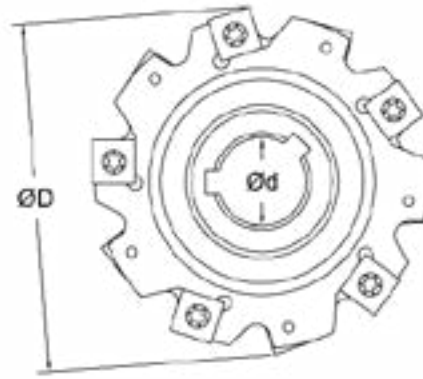


SNHX 11/12..-TA
Pag. A51



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

SN12D



CODE	ØD	Ød	h	b	E	Z	K	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SN12D6306Z6	63	22	14	6	8	6	3	VTX40	TX15	SNHX..1203..
SN12D8006Z8	80	22	22	6	8	8	4	VTX40	TX15	SNHX..1203..
SN12D10006Z10	100	27	25	6	12	10	5	VTX40	TX15	SNHX..1203..
SN12D1000708Z10	100	27	25	7/8	12	10	5	VTX40A	TX15	SNHX..1204/045..
SN12D10010Z10	100	27	25	10	12	10	5	VTX40B	TX15	SNHX..1205..
SN12D12506Z12	125	40	31	6	12	12	6	VTX40	TX15	SNHX..1203..
SN12D1250708Z12	125	40	31	7/8	12	12	6	VTX40A	TX15	SNHX..1204/045..
SN12D12510Z12	125	40	31	10	12	12	6	VTX40B	TX15	SNHX..1205..
SN12D12512Z12	125	40	31	12	12	12	6	VTX40C	TX15	SNHX..1207..
SN12D16006Z16	160	40	44	6	12	16	8	VTX40	TX15	SNHX..1203..
SN12D1600708Z16	160	40	44	7/8	12	16	8	VTX40A	TX15	SNHX..1204/045..
SN12D16010Z16	160	40	44	10	12	16	8	VTX40B	TX15	SNHX..1205..
SN12D16012Z16	160	40	44	12	12	16	8	VTX40C	TX15	SNHX..1207..
SN12D16014Z15	160	40	44	14	14	15	5	VTX40B	TX15	SNHX..1205..
SN12D20006Z18	200	50	62	6	12	18	9	VTX40	TX15	SNHX..1203..
SN12D2000708Z18	200	50	62	7/8	12	18	9	VTX40A	TX15	SNHX..1204/045..
SN12D20010Z18	200	50	62	10	12	18	9	VTX40B	TX15	SNHX..1205..
SN12D20012Z18	200	50	62	12	12	18	9	VTX40C	TX15	SNHX..1207..
SN12D20014Z18	200	50	62	14	14	18	6	VTX40B	TX15	SNHX..1205..
SN12D25010Z24	250	50	87	10	12	24	12	VTX40B	TX15	SNHX..1205..
SN12D25012Z20	250	50	87	12	12	20	10	VTX40C	TX15	SNHX..1207..

INSERTI DI RIFERIMENTO

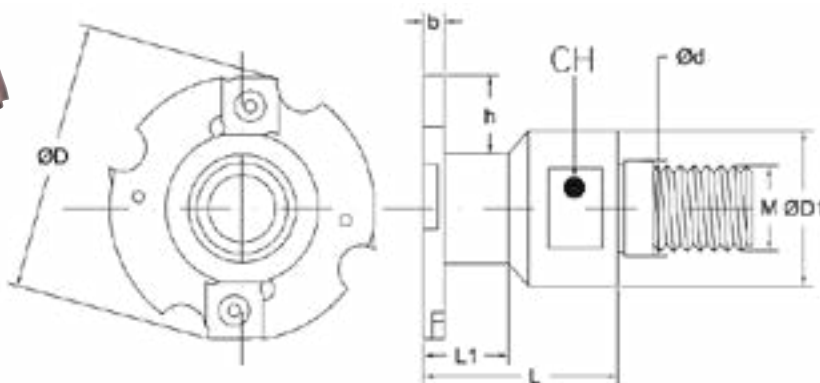


SNHX 11/12..-TA
Pag. A51



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

SN11/12DF



FRESATURA - MILLING

ELIFRESE, FRESE FORANTI, FRESE PER SCANALATURA - HELICAL, GROOVING AND DRILLING CUTTERS

CODE	Ø D	M	Ø d	b	Ø D1	h	L	L1	Z	K	CH	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SN11DF05004Z4	50	16	17	4	29	14	35	15	4	2	24	VTX35	TX9	SNHX..1102..
SN11DF05005Z4	50	16	17	5	29	14	35	15	4	2	24	VTX35A	TX9	SNHX..1103..
SN11DF06304Z8	63	16	17	4	29	14	35	-	8	4	24	VTX35	TX9	SNHX..1102..
SN11DF06305Z8	63	16	17	5	29	14	35	-	8	4	24	VTX35A	TX9	SNHX..1103..
SN11DF08004Z10	80	16	17	4	29	22,5	35	-	10	5	24	VTX35	TX9	SNHX..1102..
SN11DF08005Z10	80	16	17	5	29	22,5	35	-	10	5	24	VTX35A	TX9	SNHX..1103..

CODE	Ø D	M	Ø d	b	Ø D1	h	L	L1	Z	K	CH	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SN12DF05006Z4	50	16	17	6	29	14	35	15	4	2	24	VTX40	TX15	SNHX..1203..
SN12DF06306Z6	63	16	17	6	29	14	35	-	6	3	24	VTX40	TX15	SNHX..1203..
SN12DF08006Z8	80	16	17	6	29	22,5	35	-	8	4	24	VTX40	TX15	SNHX..1203..

INSERTI DI RIFERIMENTO

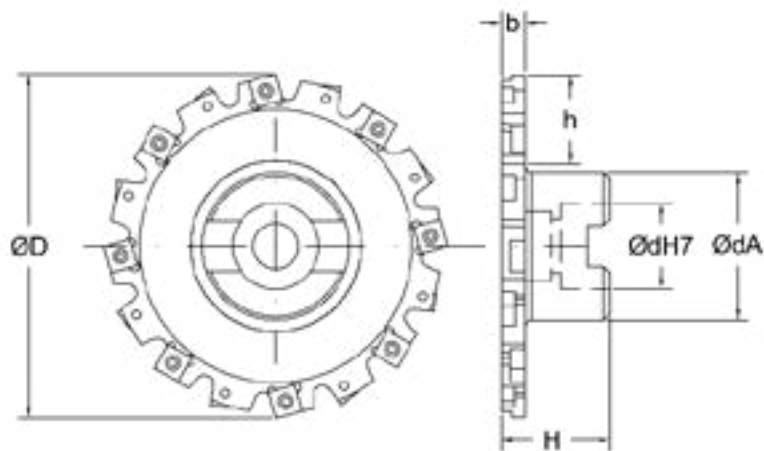


SNHX 11/12..-TA
Pag. A51



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

SN11DM



CODE	ØD	Ød	b	ØdA	H	L1	h	Z	K	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SN11DM05004Z4	50	16	4	32	50	15	8,5	4	2	VTX35	TX9	SNHX..1102..
SN11DM05005Z4	50	16	5	32	50	15	8,5	4	2	VTX35A	TX9	SNHX..1103..
SN11DM06304Z8	63	22	4	40	50	-	10,5	8	4	VTX35	TX9	SNHX..1102..
SN11DM06305Z8	63	22	5	40	50	-	10,5	8	4	VTX35A	TX9	SNHX..1103..
SN11DM08004Z10	80	22	4	40	50	-	20	10	5	VTX35	TX9	SNHX..1102..
SN11DM08005Z10	80	22	5	40	50	-	20	10	5	VTX35A	TX9	SNHX..1103..
SN11DM10004Z12	100	27	4	48	50	-	24,2	12	6	VTX35	TX9	SNHX..1102..
SN11DM10005Z12	100	27	5	48	50	-	24,2	12	6	VTX35A	TX9	SNHX..1103..

INSERTI DI RIFERIMENTO

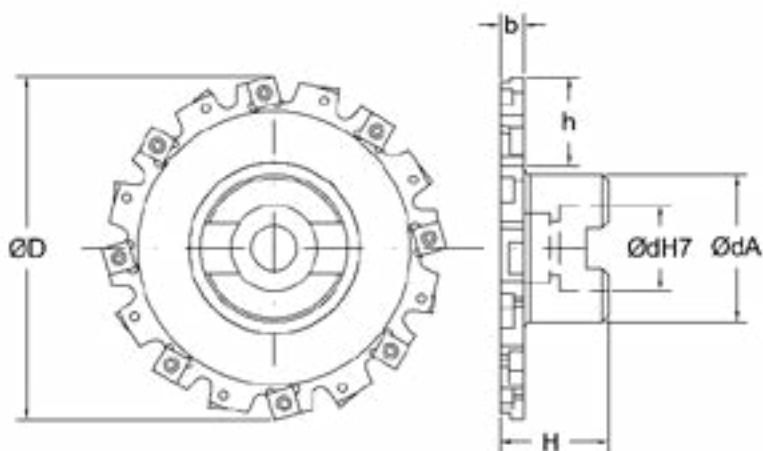


SNHX 11/12...TA
Pag. A51



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

SN12DM



CODE	ØD	Ød	b	ØdA	H	L1	h	Z	K	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SN12DM05006Z4	50	16	6	32	50	15	8,5	4	2	VTX40	TX15	SNHX..1203..
SN12DM06306Z6	63	22	6	40	50	-	10,5	6	3	VTX40	TX15	SNHX..1203..
SN12DM08006Z8	80	22	6	40	50	-	20	8	4	VTX40	TX15	SNHX..1203..
SN12DM10006Z10	100	27	6	48	50	-	24,2	10	5	VTX40	TX15	SNHX..1203..
SN12DM1000708Z10	100	27	7/8	48	50/50,5	-	24,2	10	5	VTX40A	TX15	SNHX..1204/12045..
SN12DM10010Z10	100	27	10	48	50	-	24,2	10	5	VTX40B	TX15	SNHX..1205..
SN12DM12506Z12	125	40	6	70	50	-	23,7	12	6	VTX40	TX15	SNHX..1203..
SN12DM1250708Z12	125	40	7/8	70	50/50,5	-	23,7	12	6	VTX40A	TX15	SNHX..1204/12045..
SN12DM12510Z12	125	40	10	70	50	-	23,7	12	6	VTX40B	TX15	SNHX..1205..
SN12DM12512Z12	125	40	12	70	50	-	23,7	12	6	VTX40C	TX15	SNHX..1207..
SN12DM16006Z16	160	40	6	70	50	-	41,2	16	8	VTX40	TX15	SNHX..1203..
SN12DM1600708Z16	160	40	7/8	70	50/50,5	-	41,2	16	8	VTX40A	TX15	SNHX..1204/12045..
SN12DM16010Z16	160	40	10	70	50	-	41,2	16	8	VTX40B	TX15	SNHX..1205..
SN12DM16012Z16	160	40	12	70	50	-	41,2	16	8	VTX40C	TX15	SNHX..1207..

INSERTI DI RIFERIMENTO



SNHX 11/12...TA
Pag. A51



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

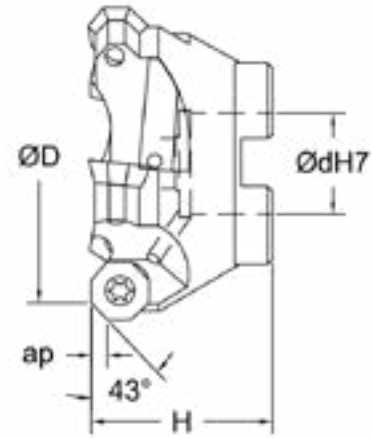
ATTACCO A MANICOTTO
SHELL SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SPIANATURA 43°

FACE 43°



OD05M



CODE	Ø D	Ø dh7	H	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
OD05M40Z3*	40	16	40	3,5	3	VT77	TX20	OD..0504..
OD05M50Z4	50	22	40	3,5	4	VT77	TX20	OD..0504..
OD05M63Z5	63	22	40	3,5	5	VT77	TX20	OD..0504..
OD05M80Z6	80	27	50	3,5	6	VT77	TX20	OD..0504..
OD05M100Z7	100	32	50	3,5	7	VT77	TX20	OD..0504..
OD05M125Z8	125	40	63	3,5	8	VT77	TX20	OD..0504..

INSERTI DI RIFERIMENTO



ODHT 05.-R2
Pag. A32

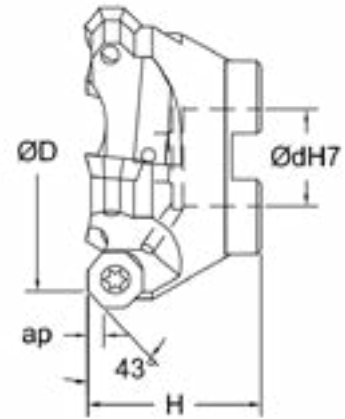


ODHW 05..
Pag. A33



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

OD06M



FRESATURA - MILLING

FRESE PER SPIANATURA - FACE MILLING CUTTERS

CODE	Ø D	Ø dh7	H	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
OD06M50Z4	50	22	40	4,5	4	VT92	TX25	OD..0605..
OD06M63Z5	63	22	40	4,5	5	VT92	TX25	OD..0605..
OD06M80Z5	80	27	50	4,5	5	VT92	TX25	OD..0605..
OD06M100Z6	100	32	50	4,5	6	VT92	TX25	OD..0605..
OD06M125Z7*	125	40	63	4,5	7	VT92	TX25	OD..0605..
OD06M160Z9*	160	40	63	4,5	9	VT92	TX25	OD..0605..

INSERTI DI RIFERIMENTO



ODHT 06..-R2
Pag. A32



ODHW 06..
Pag. A33



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

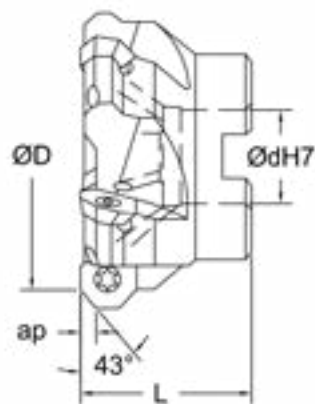
ATTACCO A MANICOTTO
SHELL SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SPIANATURA 43°

FACE 43°



OF05M



CODE	Ø D	L	Ø dh7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
OF05M32Z3	32	40	16	3,50	3	VT77	TX15	OF..05T3..
OF05M40Z3	40	40	16	3,50	3	VT77	TX15	OF..05T3..
OF05M50Z4	50	40	22	3,50	4	VT77	TX15	OF..05T3..
OF05M63Z5	63	40	22	3,50	5	VT77	TX15	OF..05T3..
OF05M80Z6	80	50	27	3,50	6	VT77	TX15	OF..05T3..
OF05M100Z7	100	50	32	3,50	7	VT77	TX15	OF..05T3..
OF05M125Z8*	125	63	40	3,50	8	VT77	TX15	OF..05T3..

INSERTI DI RIFERIMENTO

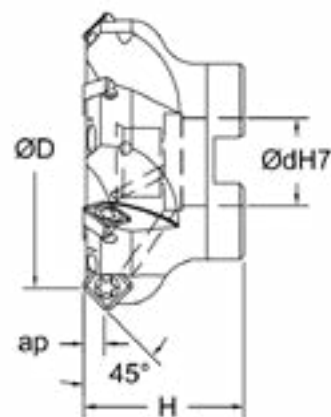


OFEX 05.-R2
Pag. A34



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

SD09MQ



FRESATURA - MILLING

FRESE PER SPIANATURA - FACE MILLING CUTTERS

CODE	Ø D	H	Ø dh7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SD09MQ40Z4	40	40	16	4	4	VT45	TX15	SD..09T3..
SD09MQ50Z4	50	42	22	4	4	VT45	TX15	SD..09T3..
SD09MQ50Z5	50	42	22	4	5	VT45	TX15	SD..09T3..
SD09MQ63Z5	63	42	22	4	5	VT45	TX15	SD..09T3..

INSERTI DI RIFERIMENTO



SDHW 09..
Pag. A78



SDXT 09..-M2/R3
Pag. A79



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

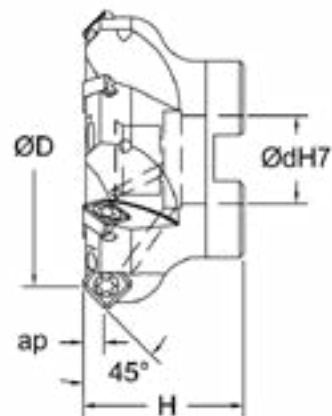
ATTACCO A MANICOTTO
SHELL SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SPIANATURA 45°

FACE 45°



SD12MQ



CODE	Ø D	H	Ø dh7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SD12MQ50Z4	50	45	22	6	4	VT45	TX20	SD..1204..
SD12MQ63Z5	63	45	22	6	5	VT45	TX20	SD..1204..
SD12MQ80Z6	80	50	27	6	6	VT45	TX20	SD..1204..
SD12MQ100Z7	100	55	32	6	7	VT45	TX20	SD..1204..
SD12MQ125Z8*	125	63	40	6	8	VT45	TX20	SD..1204..

FRESATURA - MILLING

FRESE PER SPIANATURA - FACE MILLING CUTTERS

INSERTI DI RIFERIMENTO



SDHT 12..-ME
Pag. A47

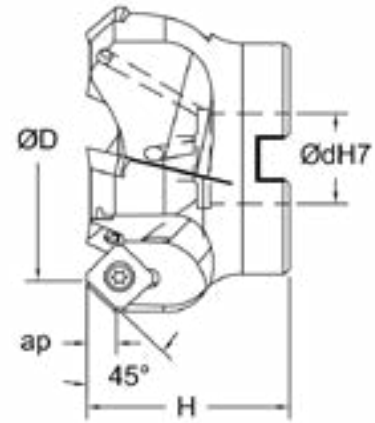


SDHW 12..
Pag. A78



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

SE12M



FRESATURA - MILLING

FRESE PER SPIANATURA - FACE MILLING CUTTERS

CODE	Ø D	H	Ø dh7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SE12M40Z3	40	40	16	6	3	VT92	TX20	SE..1204..
SE12M50Z4	50	48	22	6	4	VT92	TX20	SE..1204..
SE12M63Z5	63	48	22	6	5	VT92	TX20	SE..1204..
SE12M80Z6	80	50	27	6	6	VT92	TX20	SE..1204..
SE12M100Z6	100	50	32	6	6	VT92	TX20	SE..1204..
SE12M125Z7*	125	63	40	6	7	VT92	TX20	SE..1204..

INSERTI DI RIFERIMENTO



SEHT 12..-R1
Pag. A48



SEHW 12..
Pag. A49



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

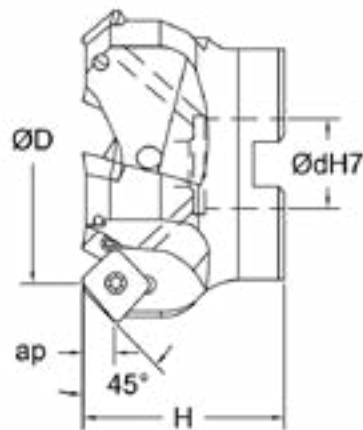
ATTACCO A MANICOTTO
SHELL SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SPIANATURA 45°

FACE 45°

HMW
hard metal working

SE13M



CODE	Ø D	H	Ø dh7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SE13M50Z4	50	40	22	6	4	VT45	TX15	SE..13T3..
SE13M63Z5	63	40	22	6	5	VT45	TX15	SE..13T3..
SE13M80Z6	80	50	27	6	6	VT45	TX15	SE..13T3..
SE13M100Z6	100	50	32	6	6	VT45	TX15	SE..13T3..
SE13M125Z7*	125	63	40	6	7	VT45	TX15	SE..13T3..

INSERTI DI RIFERIMENTO



SEKT 13...-R1
Pag. A50



SEKT 13...-R2
Pag. A80



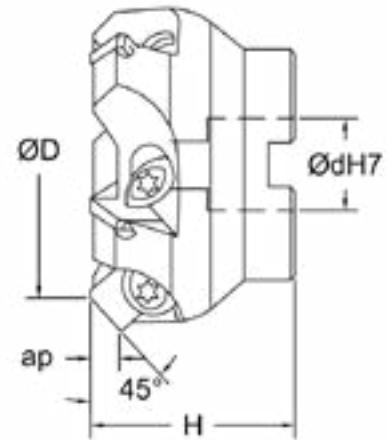
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

A125

FRESATURA - MILLING

FRESE PER SPIANATURA - FACE MILLING CUTTERS

SEH12M



FRESATURA - MILLING

FRESE PER SPIANATURA - FACE MILLING CUTTERS

CODE	Ø D	H	Ø dh7	ap	Z	VITE FISSAGGIO LOCK WASHER	CHIAVE ESAGONO HEZAGONAL KEY	INSERTO INSERT
SEH12M50Z4	50	48	22	6	4	VT88B	mm 4	SE..1203..
SEH12M63Z5	63	48	22	6	5	VT88B	mm 4	SE..1203..
SEH12M80Z6	80	50	27	6	6	VT88B	mm 4	SE..1203..
SEH12M100Z6	100	50	32	6	6	VT88B	mm 4	SE..1203..
SEH12M125Z7	125	63	40	6	7	VT88B	mm 4	SE..1203..

INSERTI DI RIFERIMENTO



SEHN 12..
Pag. A79



SEHR 12..-R2
Pag. A79



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

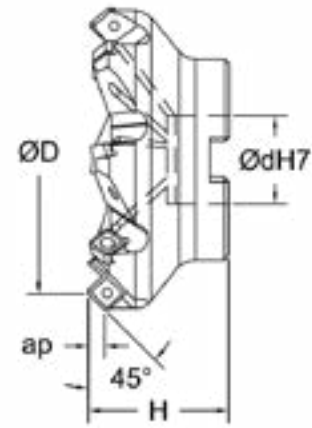
ATTACCO A MANICOTTO
SHELL SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SPIANATURA 45°

FACE 45°

HMW
hard metal working

SN12MQ



CODE	ØD	H	Ø dh7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SN12MQ50Z4	50	40	22	7	4	VT75	TX20	SN..1205..
SN12MQ63Z6	63	40	22	7	6	VT75	TX20	SN..1205..
SN12MQ80Z7	80	50	27	7	7	VT75	TX20	SN..1205..
SN12MQ100Z8	100	50	32	7	8	VT75	TX20	SN..1205..
SN12MQ125Z10*	125	63	40	7	10	VT75	TX20	SN..1205..

INSERTI DI RIFERIMENTO

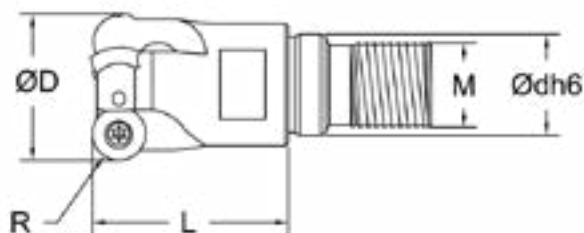


SNMX 12..-M2
Pag. A52



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

RD07/10F



FRESATURA - MILLING

FRESE PER COPIATURA - COPY MILLING CUTTERS

CODE	Ø D	L	M	Ø dh6	Z	R	VITE SCREW	CHIAVE KEY	INSERTO INSERT
RD07F12Z2	12	18	6	6,5	2	3,5	VT15	TX07	RD..0701 MO
RD07F15Z2	15	23	8	8,5	2	3,5	VT15	TX07	RD..0702 MO
RD07F16Z2	16	23	8	8,5	2	3,5	VT15	TX07	RD..0702 MO
RD07F16Z3	16	23	8	8,5	3	3,5	VT15	TX07	RD..0702 MO
RD07F20Z3	20	30	10	10,5	3	3,5	VT15	TX07	RD..0702 MO
RD07F20Z4	20	30	10	10,5	4	3,5	VT15	TX07	RD..0702 MO
RD07F25Z5	25	35	12	12,5	5	3,5	VT15	TX07	RD..0702 MO
RD07F32Z5	32	43	16	17	5	3,5	VT15	TX07	RD..0702 MO
RD10F20Z2	20	30	10	10,5	2	5	VT45	TX15	RD..1003 MO
RD10F25Z3	25	35	12	12,5	3	5	VT45	TX15	RD..1003 MO
RD10F32Z3	32	43	16	17	3	5	VT45	TX15	RD..1003 MO
RD10F32Z4	32	43	16	17	4	5	VT45	TX15	RD..1003 MO
RD10F35Z3	35	43	16	17	3	5	VT45	TX15	RD..1003 MO
RD10F35Z4	35	43	16	17	4	5	VT45	TX15	RD..1003 MO
RD10F35Z5	35	43	16	17	5	5	VT45	TX15	RD..1003 MO
RD10F40Z4	40	43	16	17	4	5	VT45	TX15	RD..1003 MO
RD10F42Z5	42	43	16	17	5	5	VT45	TX15	RD..1003 MO

INSERTI DI RIFERIMENTO



RDHT 10..-R1
Pag. A37



RDHW 07..
Pag. A40



RDMW 10..
Pag. A43



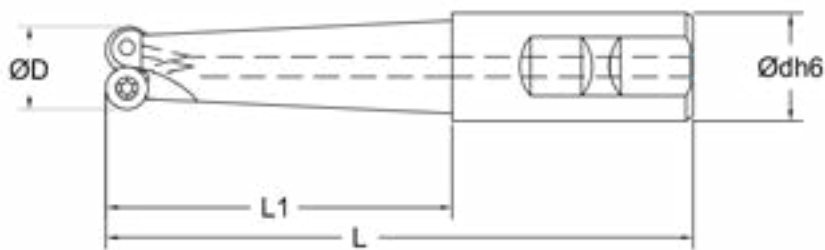
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO WELDON SERIE LUNGA
 WELDON SHANK LONG SERIES
 FORI DI LUBRIFICAZIONE
 INTERNAL COOLANT

COPIATURA
 COPYING



RD07/10WL



CODE	Ø D	L1	L	Ø dh6	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
RD07WL16Z2	16	90	140	20	2	VT15	TX07	RD..0702 MO
RD10WL20Z2	20	104	160	25	2	VT45	TX15	RD..1003 MO
RD10WL25Z2	25	104	160	25	2	VT45	TX15	RD..1003 MO

FRESATURA - MILLING

FRESE PER COPIATURA - COPY MILLING CUTTERS

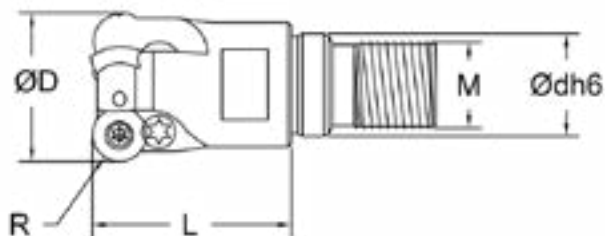
INSERTI DI RIFERIMENTO

 RDHT 10..-R1 Pag. A37	 RDHW 07.. Pag. A40	 RDMW 10.. Pag. A43
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RICHIESTA / REQUEST
 3/4 giorni / 3/4 days to delivery

RD12/16F



FRESATURA - MILLING

FRESE PER COPIATURA - COPY MILLING CUTTERS

CODE	Ø D	L	M	Ø dh6	Z	R	VITE SCREW	CHIAVE KEY	VITE FISSAGGIO FIXING SCREW	INSERTO INSERT
RD12F24Z2	24	35	12	12,5	2	6	VT45	TX15	-	RD..12T3 MO
RD12F32Z3	32	43	16	17	3	6	VT45	TX15	OM 3505	RD..12T3 MO
RD12F35Z3	35	43	16	17	3	6	VT45	TX15	-	RD..12T3 MO
RD12F40Z4	40	43	16	17	4	6	VT45	TX15	OM 3505	RD..12T3 MO
RD12F42Z4	42	43	16	17	4	6	VT45	TX15	OM 3505	RD..12T3 MO
RD16F32Z2	32	43	16	17	2	8	VT108	TX20	-	RD..1604 MO

INSERTI DI RIFERIMENTO



RDHT 10.-R1
Pag. A37



RDHW 07..
Pag. A40

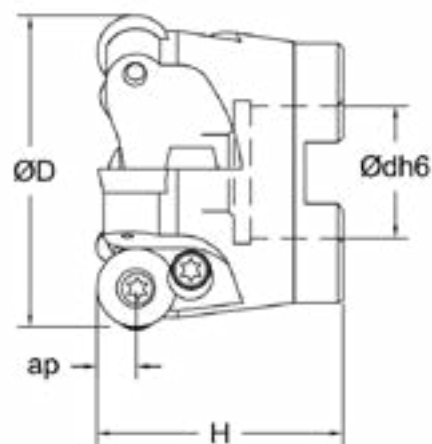


RDMW 10..
Pag. A43



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

RD12/16M



CODE	Ø D	H	Ø dh7	ap	Z	VITE SCREW	CHIAVE KEY	RONDELLA STAFFAGGIO LOCK WASHER	INSERTO INSERT
RD12M40Z4	40	40	16	6	4	VT45	TX15	OM3505	RD..12T3 MO
RD12M50Z5	50	50	22	6	5	VT45	TX15	OM3505	RD..12T3 MO
RD12M52Z5	52	50	22	6	5	VT45	TX15	OM3505	RD..12T3 MO
RD12M63Z6	63	50	22	6	6	VT45	TX15	OM3505	RD..12T3 MO
RD12M66Z6	66	50	27	6	6	VT45	TX15	OM3505	RD..12T3 MO
RD12M80Z7	80	50	27	6	7	VT45	TX15	OM3505	RD..12T3 MO
RD16M50Z4	50	50	22	8	4	VT108	TX20	RO1104	RD..1604 MO
RD16M52Z4	52	50	22	8	4	VT108	TX20	RO1104	RD..1604 MO
RD16M66Z5	66	50	27	8	5	VT108	TX20	RO1104	RD..1604 MO
RD16M80Z6	80	50	27	8	6	VT108	TX20	RO1104	RD..1604 MO
RD16M100Z7	100	55	32	8	7	VT108	TX20	RO1104	RD..1604 MO
RD16M125Z8	125	63	40	8	8	VT108	TX20	RO1104	RD..1604 MO
RD16M160Z9	160	55	40	8	9	VT108	TX20	RO1104	RD..1604 MO

INSERTI DI RIFERIMENTO



RDHT 12..-R1
Pag. A37



RDMT 16..-R4
Pag. A42



RDMT 16..-R1
Pag. A41

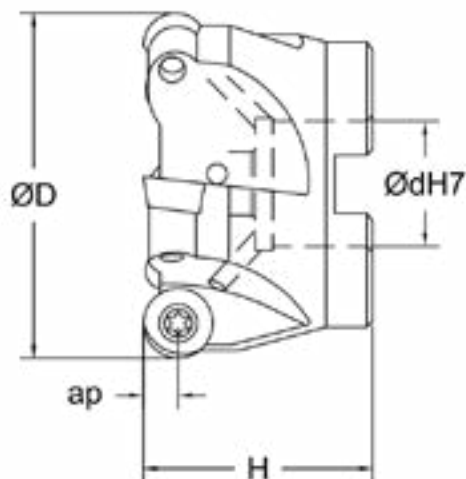


RDMW 12/16..
Pag. A43



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

RD124M



CODE	Ø D	H	Ø dH7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
RD124M40Z4	40	40	16	6	4	VT77	TX15	RD..1204 MO
RD124M50Z4	50	50	22	6	4	VT77	TX15	RD..1204 MO
RD124M52Z5	52	50	22	6	5	VT77	TX15	RD..1204 MO
RD124M63Z5	63	50	27	6	5	VT77	TX15	RD..1204 MO
RD124M80Z6	80	50	27	6	6	VT77	TX15	RD..1204 MO
RD124M100Z7	100	55	32	6	7	VT77	TX15	RD..1204 MO

INSERTI DI RIFERIMENTO

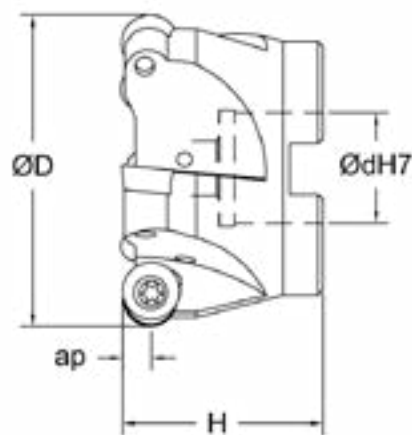


RDMW 1204..
Pag. A43



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

RP12M



CODE	Ø D	H	Ø dH7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
RP12M40Z4	40	40	16	6	4	VT77	TX15	RD..1204 MO
RP12M50Z4	50	40	22	6	4	VT77	TX15	RD..1204 MO
RP12M52Z4	52	40	22	6	5	VT77	TX15	RD..1204 MO
RP12M63Z5	63	50	27	6	5	VT77	TX15	RD..1204 MO
RP12M80Z6	80	50	27	6	6	VT77	TX15	RD..1204 MO
RP12M100Z7	100	55	32	6	7	VT77	TX15	RD..1204 MO

INSERTI DI RIFERIMENTO



RPMT 12.-R1
Pag. A44



RPMT 12.-R2
Pag. A45

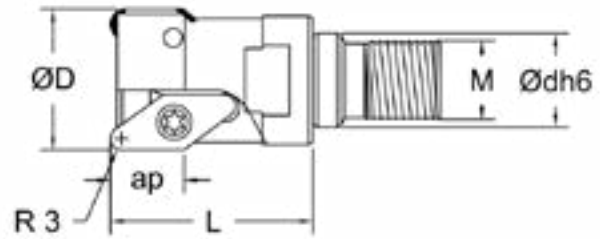


RPMW 12..
Pag. A46



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

VC22F



CODE	Ø D	L	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
VC22F32Z2	32	48	15	2	VT108	TX20	VC..2205..
VC22F42Z3	42	48	15	3	VT108	TX20	VC..2205..

INSERTI DI RIFERIMENTO

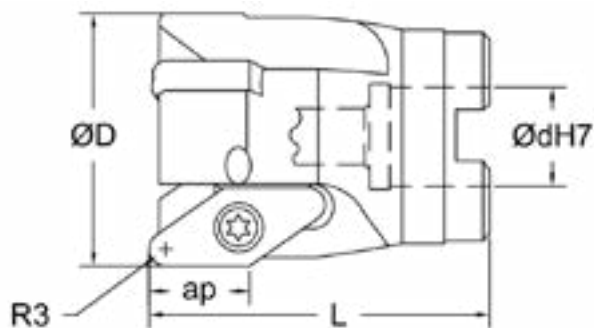


VCGT 22..RX..
Pag. A57



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

VC22M



CODE	ØD	L	Ø dH7	ap	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
VC22M42Z3	42	57	16	15	3	VT108	TX20	VC..2205..
VC22M52Z3	52	57	22	15	3	VT108	TX20	VC..2205..
VC22M66Z4	66	57	27	15	4	VT108	TX20	VC..2205..
VC22M80Z4	80	57	27	15	4	VT108	TX20	VC..2205..
VC22M100Z5	100	55	32	15	5	VT108	TX20	VC..2205..
VC22M125Z6	125	55	40	15	6	VT108	TX20	VC..2205..

INSERTI DI RIFERIMENTO



VCGT 22.-RX..
Pag. A57



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

WARC



CODE	ØD	L1	L	Ø dh6	R	VITE SCREW	CHIAVE KEY	INSERTO INSERT
WARC12Z1	12	35	140	12	6	VTX35	TX10	WAR 12
WARC16Z1	16	45	170	16	8	VTX40	TX15	WAR 16
WARC20Z1	20	55	180	20	10	VTX50	TX20	WAR 20
WARC25Z1	25	60	200	25	12,5	VTX60	TX30	WAR 25
WARC32Z1	32	60	200	32	16	VTX80	TX30	WAR 32

INSERTI DI RIFERIMENTO



WAR
Pag. A58



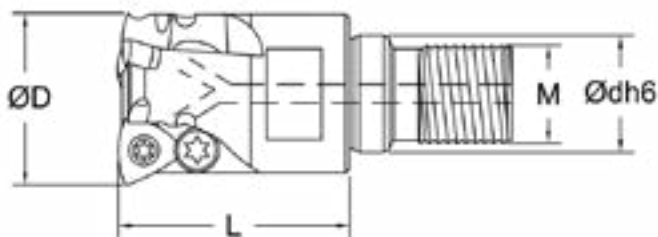
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO FILETTATO
SCREW THREAD SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

COPIATURA
COPYING



WP06F



CODE	Ø D	Ø dh6	L	M	Z	VITE SCREW	CHIAVE KEY	VITE FISSAGGIO FIXING SCREW	INSERTO INSERT
WP06F25Z2	25	12,5	36	12	2	VT65	TX15	OM3505	WP..06X415
WP06F35Z3	35	17	41	16	3	VT65	TX15	OM3505	WP..06X415
WP06F42Z4	42	17	41	16	4	VT65	TX15	OM3505	WP..06X415

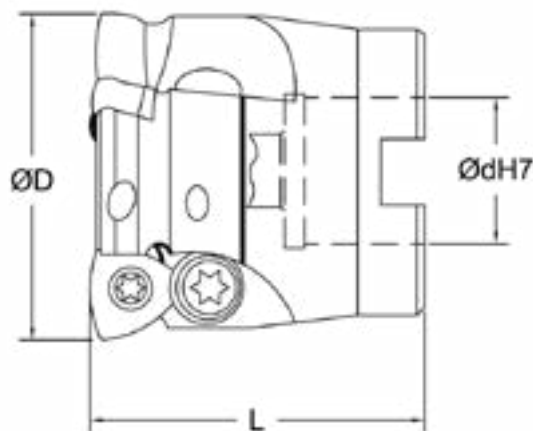
FRESATURA - MILLING

FRESE PER COPIATURA - COPY MILLING CUTTERS



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

WP08M



FRESATURA - MILLING

FRESE PER COPIATURA - COPY MILLING CUTTERS

CODE	Ø D	Ø dh7	L	Z	VITE SCREW	CHIAVE KEY	RONDELLA FISSAGGIO LOCK WASHER	INSERTO INSERT
WP08M52Z3	52	22	50	3	VT96	TX20	RO1104+VT108	WP.080615
WP08M66Z4	66	27	50	4	VT96	TX20	RO1104+VT108	WP.080615
WP08M80Z5	80	27	63	5	VT96	TX20	RO1104+VT108	WP.080615
WP08M100Z6	100	32	63	6	VT96	TX20	RO1104+VT108	WP.080615

INSERTI DI RIFERIMENTO



WPMT 08.-M2
Pag. A83

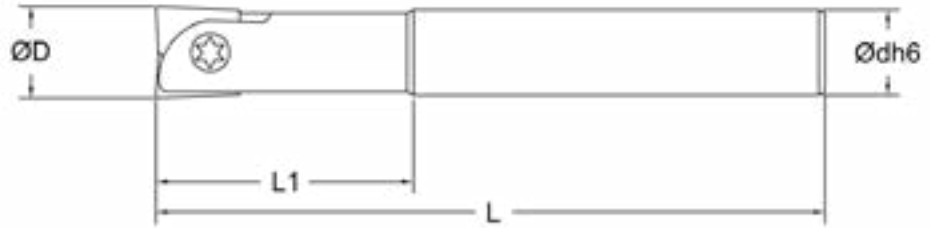


WPMW 08..
Pag. A83



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

WPBVC



CODE	Ø D	L	L1	Ø dh6	VITE SCREW	CHIAVE KEY	INSERTO INSERT
WPBVC0808Z1	8	120	40	8	VTK08	TX08	WPV/WPB 8
WPBVC0810Z1	8	120	30	10	VTK08	TX08	WPV/WPB 8
WPBVC1010Z1	10	120	40	10	VTK10	TX15	WPV/WPB 10
WPBVC1012Z1	10	150	35	12	VTK10	TX15	WPV/WPB 10
WPBVC1212Z1	12	160	50	12	VTK12	TX20	WPV/WPB 12
WPBVC1616Z1	16	175	53	16	VTK16	TX20	WPV/WPB 16
WPBVC2020Z1	20	190	61	20	VTK20	TX20	WPV/WPB 20
WPBVC2525Z1	25	190	70	25	VTK25	TX30	WPV/WPB 25
WPBVC3232Z1	32	210	80	32	VTK32	TX30	WPV/WPB 32

INSERTI DI RIFERIMENTO



WPBCF.
Pag. A59



WPBN.
Pag. A60

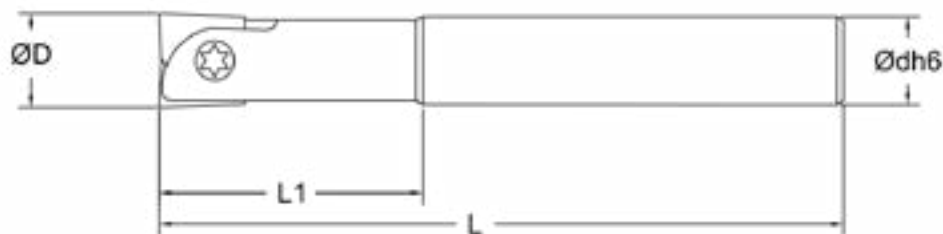


WPVN.
Pag. A62



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

WPBVCD



CODE	Ø D	L1	L	Ø dh6	VITE SCREW	CHIAVE KEY	INSERTO INSERT
WPBVCD0808Z1	8	30	100	8	VTK08	TX08	WPV/WPB 8
WPBVCD1010Z1	10	35	120	10	VTK10	TX15	WPV/WPB 10
WPBVCD1212Z1	12	50	160	12	VTK12	TX20	WPV/WPB12
WPBVCD1616Z1	16	55	175	16	VTK16	TX20	WPV/WPB 16
WPBVCD2020Z1	20	75	190	20	VTK20	TX20	WPV/WPB 20

INSERTI DI RIFERIMENTO



WPBCF.
Pag. A59



WPBN.
Pag. A60

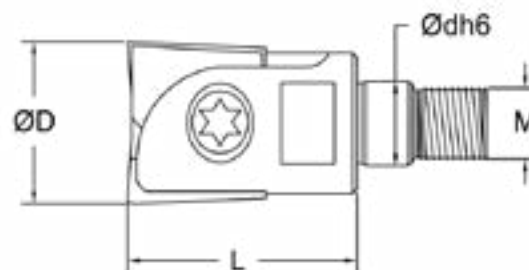


WPVN.
Pag. A62



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

WPBVF



CODE	Ø D	L	M	Ø dh6	VITE SCREW	CHIAVE KEY	INSERTO INSERT
WPBVF12Z1	12	20	6	6,5	VTK12	TX15	WPV/WPB 12
WPBVF16Z1	16	25	8	8,5	VTK16	TX20	WPV/WPB 16
WPBVF20Z1	20	30	10	10,5	VTK20	TX20	WPV/WPB 20
WPBVF25Z1	25	35	12	12,5	VTK25	TX25	WPV/WPB 25
WPBVF32Z1	32	45	16	17	VTK32	TX30	WPV/WPB 32

INSERTI DI RIFERIMENTO



WPBCF..
Pag. A59



WPBN..
Pag. A60



WPVN..
Pag. A62



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

WPRC



CODE	ØD	L1	L	Ø dh6	R	VITE SCREW	CHIAVE KEY	INSERTO INSERT
WPRC0808Z1	8	40	120	8	4	VTK08	TX08	WPR 08
WPRC0810Z1	8	30	120	10	4	VTK08	TX08	WPR 08
WPRC1010Z1	10	40	150	10	5	VTK10	TX15	WPR 10
WPRC1012Z1	10	35	150	12	5	VTK10	TX15	WPR 10
WPRC1212Z1	12	50	160	12	6	VTK12	TX20	WPR 12
WPRC1616Z1	16	53	175	16	8	VTK16	TX20	WPR 16
WPRC2020Z1	20	61	190	20	10	VTK20	TX20	WPR 20
WPRC2525Z1	25	70	190	25	12,5	VTK25	TX30	WPR 25
WPRC3232Z1	32	80	210	32	16	VTK32	TX30	WPR 32

INSERTI DI RIFERIMENTO

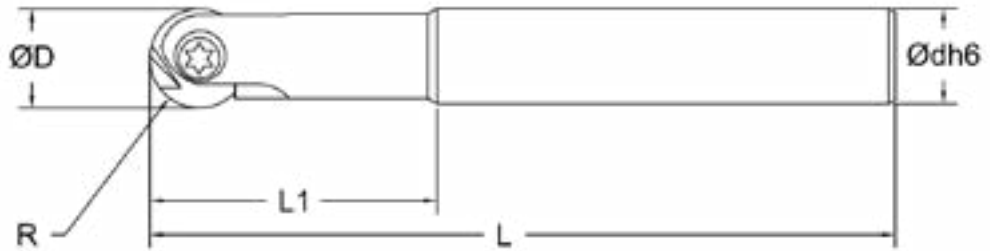


WPR..
Pag. A61



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

WPRCD



CODE	Ø D	L1	L	Ø dh6	R	VITE SCREW	CHIAVE KEY	INSERTO INSERT
WPRCD08Z1	8	25	100	8	4	VTK08	TX08	WPR 08
WPRCD10Z1	10	35	120	10	5	VTK10	TX15	WPR 10
WPRCD12Z1	12	50	160	12	6	VTK12	TX20	WPR 12
WPRCD16Z1	16	55	175	16	8	VTK16	TX20	WPR 16
WPRCD20Z1	20	75	190	20	10	VTK20	TX20	WPR 20

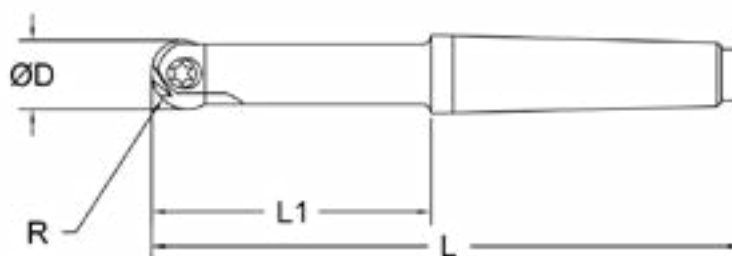
INSERTI DI RIFERIMENTO



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery



WPRCM



CODE	ØD	L1	L	CONO MORSE	R	VITE SCREW	CHIAVE KEY	INSERTO INSERT
WPR16CM2	16	55	125	CM2	8	KTS16	TX20	WPR 16
WPR20CM2	20	70	140	CM2	10	KTS20	TX20	WPR 20
WPR25CM3	25	70	170	CM3	12,5	KTS25	TX30	WPR 25
WPR32CM4	32	80	190	CM4	16	KTS32	TX30	WPR 32
WPR32M4L	32	95	205	CM4	16	KTS32	TX30	WPR 32

INSERTI DI RIFERIMENTO

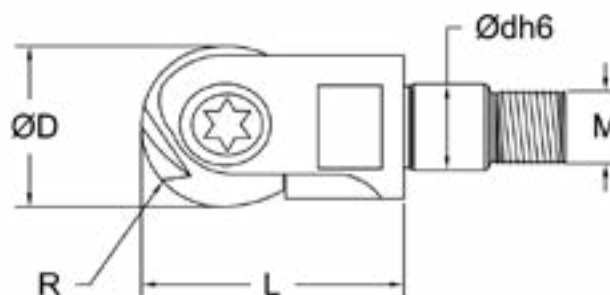


WPR..
Pag. A61



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

WPRF



CODE	Ø D	L	M	Ø dh6	R	VITE SCREW	CHIAVE KEY	INSERTO INSERT
WPRF12Z1	12	20	6	6,5	6	VTK12	TX15	WPR 12
WPRF16Z1	16	25	8	8,5	8	VTK16	TX20	WPR 16
WPRF20Z1	20	30	10	10,5	10	VTK20	TX20	WPR 20
WPRF25Z1	25	35	12	12,5	12,5	VTK25	TX30	WPR 25
WPRF32Z1	32	45	16	17	16	VTK32	TX30	WPR 32

INSERTI DI RIFERIMENTO

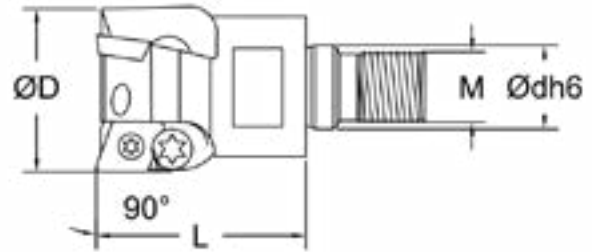


WPR..
Pag. A61



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

XD04/06/10F90



FRESATURA - MILLING

FRESE PER COPIATURA - COPY MILLING CUTTERS

CODE	Ø D	L	M	Ø dh6	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
XD04F9010Z2	10	18	6	6,5	2	VT180	TX06	XD..0401..
XD04F9012Z2	12	18	6	6,5	2	VT180	TX06	XD..0401..
XD06F9016Z2	16	23	8	8,5	2	VT15	TX07	XD..0602..
XD06F9020Z3	20	30	10	10,5	3	VT15	TX07	XD..0602..
XD06F9025Z3	25	35	12	12,5	3	VT15	TX07	XD..0602..
XD06F9025Z4	25	35	12	12,5	4	VT15	TX07	XD..0602..
XD10F9035Z3	35	43	16	17	3	VT45 + OM 3505	TX15	XD..10T3..
XD10F9042Z4	42	43	16	17	4	VT45 + OM 3505	TX15	XD..10T3..

INSERTI DI RIFERIMENTO

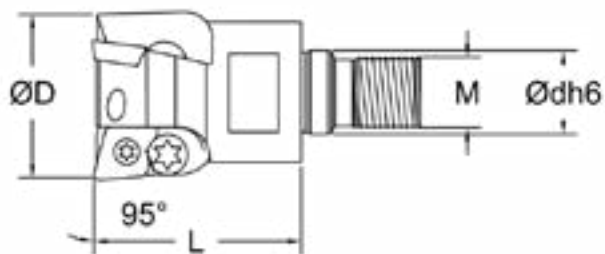


XDHX 04/06/10..
Pag. A63



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

XD04/06/10F95



CODE	Ø D	L	M	Ø dh6	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
XD04F9510Z2	10	18	6	6,5	2	VT180	TX06	XD..0401..
XD04F9512Z2	12	18	6	6,5	2	VT180	TX06	XD..0401..
XD04F9515Z3	15	18	6	6,5	3	VT180	TX06	XD..0401..
XD06F9516Z2	16	23	8	8,5	2	VT15	TX07	XD..0602..
XD06F9520Z3	20	30	10	10,5	3	VT15	TX07	XD..0602..
XD06F9525Z3	25	35	12	12,5	3	VT15	TX07	XD..0602..
XD06F9525Z4	25	35	12	12,5	4	VT15	TX07	XD..0602..
XD06F9535Z5	35	43	16	17	5	VT15	TX07	XD..0602..
XD06F9542Z6	42	43	16	17	6	VT15	TX07	XD..0602..
XD10F9535Z3	35	43	16	17	3	VT45 + OM 3505	TX15	XD..10T3..
XD10F9542Z4	42	43	16	17	4	VT45 + OM 3505	TX15	XD..10T3..

INSERTI DI RIFERIMENTO

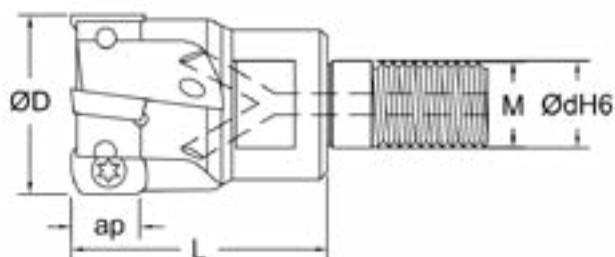


XDHX 04/06/10..
Pag. A63



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

XP10F



FRESATURA - MILLING

FRESE PER COPIATURA - COPY MILLING CUTTERS

CODE	Ø D	Ø dh6	L	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
XP10F16Z2	16	8,5	23	2	VM2506	TX8	XP..1003
XP10F20Z3	20	10,5	30	3	VM2575	TX8	XP..1003
XP10F25Z4	25	12,5	35	4	VM2575	TX8	XP..1003
XP10F32Z5	32	17	42	5	VM2575	TX8	XP..1003

INSERTI DI RIFERIMENTO



XPHW 10..
Pag. A69



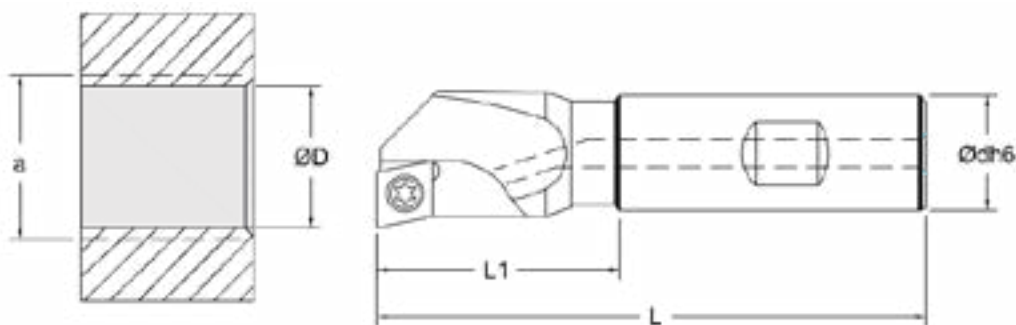
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO WELDON
 WELDON SHANK
 FORI DI LUBRIFICAZIONE
 INTERNAL COOLANT

LAMATURA
 SPOT FACING



CC06WAL

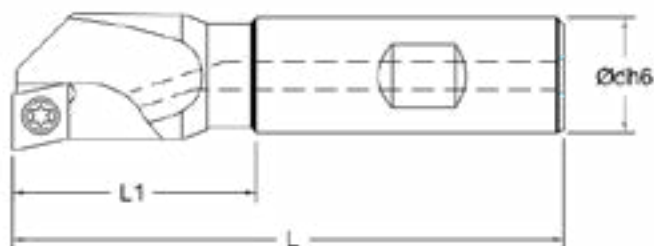
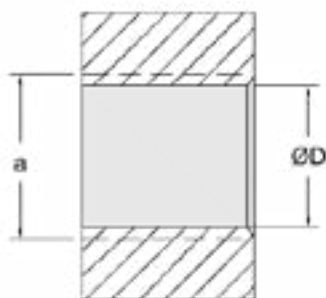


CODE	ØD	L1	L	Ø dh6	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
CC06WAL10Z1	9,8	23	90	8	1	VT15	TX08	CC..0602..
CC06WAL11Z1	10,8	24	105	10	1	VT15	TX08	CC..0602..
CC06WAL12Z1	11,8	25	105	10	1	VT15	TX08	CC..0602..
CC06WAL13Z1	12,8	25	105	10	1	VT15	TX08	CC..0602..
CC06WAL14Z1	13,8	27	110	12	1	VT15	TX08	CC..0602..
CC06WAL15Z1	14,8	28	120	12	1	VT15	TX08	CC..0602..
CC06WAL16Z1	15,8	29	125	12	1	VT15	TX08	CC..0602..
CC06WAL17Z1	16,8	30	140	16	1	VT15	TX08	CC..0602..
CC06WAL18Z1	17,8	31	140	16	1	VT15	TX08	CC..0602..
CC06WAL19Z1	18,8	31	150	16	1	VT15	TX08	CC..0602..
CC06WAL20Z1	19,8	33	150	16	1	VT15	TX08	CC..0602..

RICHIESTA / REQUEST
 3/4 giorni / 3/4 days to delivery



CC09WAL



CODE	Ø D	L1	L	Ø dh6	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
CC09WAL21Z1	20,8	34	160	20	1	VT65	TX15	CC..09T3..
CC09WAL22Z1	21,8	35	160	20	1	VT65	TX15	CC..09T3..
CC09WAL23Z1	22,8	36	165	20	1	VT65	TX15	CC..09T3..
CC09WAL24Z1	23,8	37	170	20	1	VT65	TX15	CC..09T3..
CC09WAL25Z1	24,8	38	180	20	1	VT65	TX15	CC..09T3..
CC09WAL26Z1	25,8	39	185	20	1	VT65	TX15	CC..09T3..
CC09WAL27Z1	26,8	40	190	20	1	VT65	TX15	CC..09T3..
CC09WAL28Z1	27,8	40	190	20	1	VT65	TX15	CC..09T3..
CC09WAL29Z1	28,8	43	200	20	1	VT65	TX15	CC..09T3..
CC09WAL30Z1	29,8	43	200	25	1	VT65	TX15	CC..09T3..
CC09WAL31Z1	30,8	44	200	25	1	VT65	TX15	CC..09T3..
CC09WAL32Z1	31,8	45	200	25	1	VT65	TX15	CC..09T3..



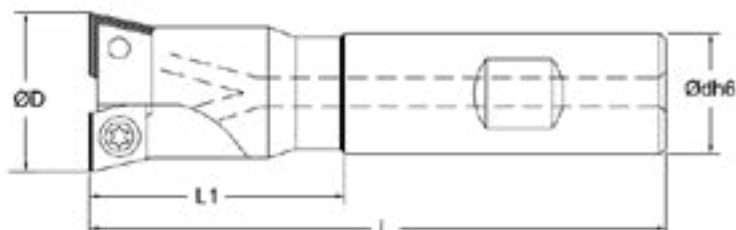
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO WELDON
WELDON SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

ALESATURA
BORING



CC06WLA



CODE	ØD	Øa	L1	L	Ødh6	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
CC06WLA15Z1	15	5	30	85	12	1	VT15	TX08	CC..0602..
CC06WLA16Z2	16	5	30	92	12	2	VT15	TX08	CC..0602..
CC06WLA17Z2	17	6	32	94	16	2	VT15	TX08	CC..0602..
CC06WLA175Z2	17,5	6,5	40	96	16	2	VT15	TX08	CC..0602..
CC06WLA18Z2	18	7	41	97	16	2	VT15	TX08	CC..0602..
CC06WLA19Z2	19	8	41	100	16	2	VT15	TX08	CC..0602..
CC06WLA20Z2	20	9	41	102	16	2	VT15	TX08	CC..0602..
CC06WLA21Z2	21	10	41	105	16	2	VT15	TX08	CC..0602..
CC06WLA22Z2	22	11	41	110	16	2	VT15	TX08	CC..0602..
CC06WLA23Z2	23	12	41	112	16	2	VT15	TX08	CC..0602..
CC06WLA24Z2	24	13	41	115	16	2	VT15	TX08	CC..0602..

RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

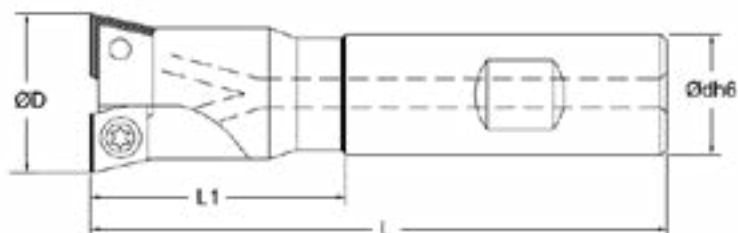
A151



FRESATURA - MILLING

LAMATURA, ALESATURA, SMUSSI - SPOT FACING, BORING AND CHAMFERING MILLING CUTTERS

CC09WLA



FRESATURA - MILLING

LAMATURA, ALESATURA, SMUSSI - SPOT FACING, BORING AND CHAMFERING MILLING CUTTERS

CODE	Ø D	Ø a	L1	L	Ø dh6	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
CC09WLA25Z2	25	8	40	120	16	2	VT65	TX15	CC..09T3..
CC09WLA26Z2	26	9	55	125	20	2	VT65	TX15	CC..09T3..
CC09WLA27Z2	27	10	55	128	20	2	VT65	TX15	CC..09T3..
CC09WLA28Z2	28	11	55	130	20	2	VT65	TX15	CC..09T3..
CC09WLA29Z2	29	12	55	132	20	2	VT65	TX15	CC..09T3..
CC09WLA30Z2	30	13	55	134	20	2	VT65	TX15	CC..09T3..
CC09WLA31Z2	31	14	55	136	20	2	VT65	TX15	CC..09T3..
CC09WLA32Z2	32	15	55	138	20	2	VT65	TX15	CC..09T3..
CC09WLA33Z2	33	16	55	140	20	2	VT65	TX15	CC..09T3..
CC09WLA34Z2	34	16	60	140	25	2	VT65	TX15	CC..09T3..
CC09WLA35Z2	35	17	60	140	25	2	VT65	TX15	CC..09T3..
CC09WLA38Z2	38	20	60	140	25	2	VT65	TX15	CC..09T3..
CC09WLA42Z2	42	24	60	140	25	2	VT65	TX15	CC..09T3..



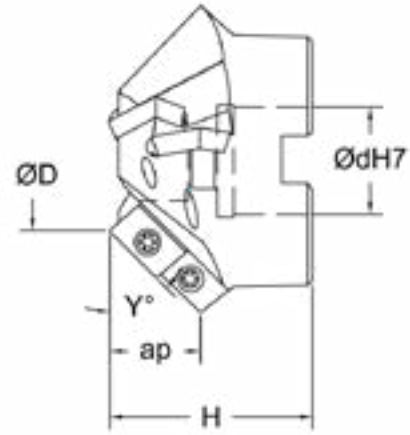
RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

ATTACCO WELDON
WELDON SHANK
FORI DI LUBRIFICAZIONE
INTERNAL COOLANT

SMUSSI 30° 45° 60°
CHAMFERING 30° 45° 60°



AP16MS



CODE	Ø D	a	H	Ø dh7	Y°	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
AP16MS3515Z33	35	8	50	27	15	3+3	VT75	TX15	AP..1604..
AP16MS3530Z33	35	15	50	27	30	3+3	VT75	TX15	AP..1604..
AP16MS3545Z33	35	21,5	50	27	45	3+3	VT75	TX15	AP..1604..
AP16MS3560Z33	35	26,5	50	27	60	3+3	VT75	TX15	AP..1604..

INSERTI DI RIFERIMENTO				
 APEX 16..-RX Pag. A21	 APEX 16..-RA Pag. A22	 APFT 16..-R1 Pag. A71	 APHT 16..-MA Pag. A72	 APHT 16..-R2 Pag. A72
 APHW 16.. Pag. A25	 APKT 16..-M2 Pag. A26	 APKT 16..-ME Pag. A27		



RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

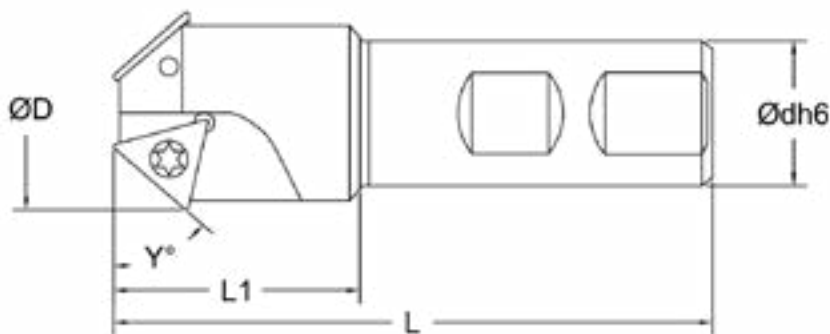
SC09WS/L



CODE	Ø D	L	L1	Ø dh6	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
SC09WS12Z1	12	100	25	20	1	VT75	TX15	SC..09T3..
SC09WS16Z2	16	100	35	20	2	VT75	TX15	SC..09T3..
SC09WS30Z3	30	100	35	25	3	VT75	TX15	SC..09T3..
SC09WSL12Z1	12	200	25	20	1	VT75	TX15	SC..09T3..
SC09WSL16Z2	16	200	42	20	2	VT75	TX15	SC..09T3..
SC09WSL30Z3	30	200	40	25	3	VT75	TX15	SC..09T3..



TC11/16WS



CODE	Ø D	L1	L	Ø dh6	Y°	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
TC11WS1645Z1	15,5	20	70	12	45°	1	VT15	TX08	TC..1102..
TC11WS2145Z2	19,5	35	90	20	45°	2	VT15	TX08	TC..1102..
TC11WS1660Z1	16	20	70	12	60°	1	VT15	TX08	TC..1102..
TC11WS2660Z2	26	35	90	20	60°	2	VT15	TX08	TC..1102..

CODE	Ø D	L1	L	Ø dh6	Y°	Z	VITE SCREW	CHIAVE KEY	INSERTO INSERT
TC16WS3230Z2	32	39	95	20	30°	2	VT70	TX15	TC..16T3..
TC16WS2045Z1	20	45	95	20	45°	1	VT65	TX15	TC..16T3..
TC16WS32545Z2	32,5	39	95	25	45°	2	VT70	TX15	TC..16T3..
TC16WS3560Z2	35	39	95	25	60°	2	VT70	TX15	TC..16T3..

RICHIESTA / REQUEST
3/4 giorni / 3/4 days to delivery

