

CUTTERS FOR ROUND INSERTS - K0-90°

r6 - diam. 42 - 80 mm, 7° positive rake angle, with shims



- increased reliability against fractures during machining
- optimum protection of milling cutter body by shim
- in case of insert fracture, shims, screws and threaded bushes can be replaced separately, it is not necessary to buy a new body

Milling cutter bodies		Catalogue no.										Accessories		Features
		d ₁	d	r	l ₃	l ₂	l ₁	d ₂	d ₃	z				

Shell type milling cutter bodies														
	42 310/7 HL	42	12	6	42	3.5	-	diam. 16	35	4	A, B, C, D, E, F, G, H, I			
	52 310/7 HL	52	12	6	52.5	3.5	-	diam. 22	40	5	A, B, C, D, E, F, G, H, I			
	66 310/7 HL	66	12	6	52.5	3.5	-	diam. 27	48	6	A, B, C, D, E, F, G, H, I			
	80 310/7 HL	80	12	6	52.5	3.5	-	diam. 27	60	7	A, B, C, D, E, F, G, H, I			

Accessories					
<p>35 500 L Torx screw A > Page 195</p>	<p>35 510 locking screw B > Page 195</p>	<p>35 500 I threaded and tapped bush C > Page 196</p>	<p>09 511 Shim for RDHX 12T3 D > Page 196</p>	<p>15 500 Torx-screwdriver E > Page 196</p>	<p>INBUS 3,5 W Allen key 3,5 F > Page 197</p>
<p>TV 2-8 Screwdriver torque Vario®-S with window scale G > Page 197</p>	<p>T15 500 Torx interchangeable bit for Torque Vario® H > Page 197</p>	<p>T15 502 Torx MagicSpring compatible bit f. Torque Vario® I > Page 198</p>			

Indexable inserts	Catalogue no.	DIN Specification	Carbide Grade	Coating	d	s	r	M
	03 12 835K	RDHX 12T3 M0T	HSC 05	PVTi	12	3.97	6	M 3.5
	03 12 837K	RDMX 12T3 M0T	HSC 05	PVFN	12	3.97	6	M 3.5
	03 12 840K	RDHX 12T3 M0T	P40	PVTi	12	3.97	6	M 3.5
	03 12 842K	RDEX 12T3 M0T	P40	PVSR	12	3.97	6	M 3.5
	03 12 8042K	RDEX 12T3 M0T	P40	PCSR	12	3.97	6	M 3.5
	03 12 844K	RDHX 12T3 M0T	P40	PVML	12	3.97	6	M 3.5
	03 12 846K	RDMX 12T3 M0T	P40	PVGO	12	3.97	6	M 3.5
	03 12 850K	RDHX 12T3 M0T	P25	PVTi	12	3.97	6	M 3.5
	03 12 852K	RDEX 12T3 M0T	P25	PVSR	12	3.97	6	M 3.5
	03 12 860K	RDHX 12T3 M0T	K10	PVTi	12	3.97	6	M 3.5
	03 12 831P	RDHX 12T3 M0T	K10	polished	12	3.97	6	M 3.5
	03 12 848K	RDMX 12T3 M0T	P40	PVGO	12	3.97	6	M 3.5
	03 12 880	RDHX 12T3 M0T	K10	PVTi	12	3.97	6	M 3.5
	03 12 880 D	RDHX 12T3 M0T	K10	PVDiaN	12	3.97	6	M 3.5
	03 12 896K	RDMT 12T3 M0EN	M40	PVST	12	3.97	6	M 3.5
	03 12 897K	RDPX 12T3 M0T	P25	PVGO	12	3.97	6	M 3.5
	03 12 8099K	RDMT 12T3 M0EN	M35	PCTC	12	3.97	6	M 3.5

Feed per tooth (fz) | d.o.c. (ap)

Material		steel	stainless steel	cast iron	non-ferrous materials	high-temperature alloys	hardened steel
Quality Coating	Feed per tooth d.o.c.						
HSC 05 PVTi	f _z (mm)	0,1-0,2	0,15	0,15-0,4	0,1-0,25	-	0,1-0,18
	a _p (mm)	0,1-0,8	0,1	0,1-1,5	0,1-1,05	-	0,1-0,4
HSC 05 PVFN	f _z (mm)	0,1-0,4	0,12-0,24	0,12-0,4	0,12-0,24	-	0,1-0,25
	a _p (mm)	0,1-1,5	0,1-0,3	0,1-1,5	0,1-0,3	-	0,1-0,7
P40 PVTi	f _z (mm)	0,2-0,7	-	-	-	-	-
	a _p (mm)	0,2-2	-	-	-	-	-
P40 PVSR	f _z (mm)	0,2-0,8	-	0,1-0,4	-	-	0,1-0,18
	a _p (mm)	0,2-2	-	0,1-1,5	-	-	0,1-0,4
P40 PCSR	f _z (mm)	0,2-1	-	0,15-1	-	-	-
	a _p (mm)	0,2-2	-	0,2-1,5	-	-	-
P40 PVML	f _z (mm)	0,2-0,8	-	0,1-0,4	-	-	0,1-0,18
	a _p (mm)	0,2-2	-	0,1-1,5	-	-	0,1-0,4
P40 PVGO	f _z (mm)	0,12-1	-	0,1-0,4	-	-	-
	a _p (mm)	0,1-2	-	0,1-1,5	-	-	-
P25 PVTi	f _z (mm)	0,15-0,4	-	0,15-0,28	-	-	-
	a _p (mm)	0,1-1,5	-	0,1-0,8	-	-	-
P25 PVSR	f _z (mm)	0,2-0,8	-	0,1-0,4	-	-	0,1-0,18
	a _p (mm)	0,2-2	-	0,1-1,5	-	-	0,1-0,4
K10 PVTi	f _z (mm)	-	0,15	-	0,1-0,4	0,1-0,25	-
	a _p (mm)	-	0,1	-	0,1-2	0,1-1	-
K10 polished	f _z (mm)	-	-	-	0,1-0,4	-	-
	a _p (mm)	-	-	-	0,1-2	-	-
K10 PVDiaN	f _z (mm)	-	-	-	0,1-0,4	-	-
	a _p (mm)	-	-	-	0,1-2	-	-
M40 PVST	f _z (mm)	0,1-0,8	0,08-0,8	-	-	0,08-0,5	-
	a _p (mm)	0,1-2	0,1-2,5	-	-	0,12-2,5	-
P25 PVGO	f _z (mm)	-	0,2-0,8	-	-	0,12-0,5	-
	a _p (mm)	-	0,25-2	-	-	0,12-1,5	-
M35 PCTC	f _z (mm)	-	0,08-0,65	-	-	0,08-0,5	-
	a _p (mm)	-	0,1-2,5	-	-	0,12-2,5	-

Cutting speed (Vc in m/min)

Material								
Quality Coating	Application	steel	stainless steel	cast iron	non-ferrous materials	high-temperature alloys	hardened steel	
HSC 05 PVTi	roughing	-	-	▽100 150 200	-	-	-	
	pre finishing	▽150 275 400	-	▽150 225 300	▽200 500 800	-	▽35 143 250	
	finishing	▽150 275 400	▽100 150 200	▽200 275 350	▽100 450 800	-	▽35 143 250	
HSC 05 PVFN	roughing	-	-	▽100 150 200	-	-	-	
	pre finishing	▽120 160 200	-	▽100 150 200	▽200 500 800	-	▽40 130 220	
	finishing	▽150 250 350	▽100 150 200	▽200 275 350	▽200 500 800	-	▽40 130 220	
P40 PVTi	roughing	▽100 160 220	-	-	-	-	-	
	pre finishing	▽100 175 250	-	-	-	-	-	
	finishing	-	-	-	-	-	-	
P40 PVSR	roughing	▽100 200 300	-	▽160 190 220	-	-	-	
	pre finishing	▽100 200 300	-	▽160 190 220	-	-	▽70 110 150	
	finishing	-	-	▽160 190 220	-	-	-	
P40 PCSR	roughing	▽130 190 250	-	▽120 170 220	-	-	-	
	pre finishing	▽150 225 300	-	▽150 200 250	-	-	-	
	finishing	-	-	▽180 230 280	-	-	-	
P40 PVML	roughing	▽100 200 300	-	▽140 215 290	-	-	-	
	pre finishing	▽100 200 300	-	▽140 170 200	-	-	▽70 110 150	
	finishing	-	-	-	-	-	-	
P40 PVGO	roughing	▽100 150 200	-	▽110 130 150	-	-	-	
	pre finishing	▽100 150 200	-	▽110 130 150	-	-	-	
	finishing	-	-	-	-	-	-	
P25 PVTi	roughing	▽100 200 300	-	-	-	-	-	
	pre finishing	▽100 125 150	-	▽130 150 170	-	-	-	
	finishing	▽150 250 350	-	▽150 200 250	-	-	-	
P25 PVSR	roughing	▽100 160 220	-	▽140 180 220	-	-	-	
	pre finishing	▽100 180 260	-	▽160 190 220	-	-	▽70 110 150	
	finishing	-	-	▽160 190 220	-	-	-	
K10 PVTi	roughing	-	-	▽150 175 200	▽100 450 800	▽35 43 50	-	
	pre finishing	-	-	▽150 175 200	▽100 450 800	▽35 43 50	▽35 108 180	
	finishing	▽140 220 300	▽120 150 180	▽150 200 250	▽100 450 800	▽35 43 50	-	
K10 polished	roughing	-	-	-	▽100 450 800	-	-	
	pre finishing	-	-	-	▽100 450 800	-	-	
	finishing	-	-	-	▽100 450 800	-	-	
K10 PVDiaN	roughing	-	-	-	▽100 450 800	-	-	
	pre finishing	-	-	-	▽100 450 800	-	-	
	finishing	-	-	-	▽100 450 800	-	-	
M40 PVST	roughing	▽80 140 200	▽80 130 180	-	-	▽30 55 80	-	
	pre finishing	▽100 150 200	▽100 155 210	-	-	▽40 65 90	-	
	finishing	▽110 180 250	▽120 185 250	-	-	▽60 90 120	-	
P25 PVGO	roughing	-	▽80 140 200	-	-	▽20 65 110	-	
	pre finishing	-	▽100 155 210	-	-	▽20 65 110	-	
	finishing	-	▽120 175 230	-	-	▽30 70 110	-	
M35 PCTC	roughing	-	▽110 155 200	-	-	▽30 65 100	-	
	pre finishing	-	▽120 175 230	-	-	▽40 75 110	-	
	finishing	-	▽160 220 280	-	-	▽60 100 140	-	

Extended operation data

Plunging

Cutter diam. d1	X _{max}
42-80	3

Ramping

Cutter diam. d1	α°	y
42	<6,5	20
52	<5,7	30
66	<3,9	44
80	<3,0	58

Helix

Cutter diam. d1	D _{min}	D _{max}
42	62	84
52	82	104
66	110	132
80	136	160