

CUTTERS FOR ROUND INSERTS - K0-90°

r6 - diam. 24 - 80 mm, neutral or 7° positive rake angle



The allrounder:

- for high-speed-machining centres
- 7° only for roughing-operations
- 0° for roughing- and finishing-operations

Milling cutter bodies		Catalogue no.										Accessories		Features
		d ₁	d	r	l ₃	l ₂	l ₁	d ₂	d ₃	z				
Threaded shank end mill bodies 0° axial rake angle														
	24 200	24	12	6	33	-	-	M 12	21	2	A, B, C, D, E, F			
	35 200	35	12	6	43	3	-	M 16	29	3	A, B, C, D, E, F			
	4 35 200	35	12	6	43	3	-	M 16	29	4	A, C, D, E, F			
	42 200	42	12	6	43	3	-	M 16	29	4	A, B, D, E, F			
	5 42 200	42	12	6	43	3	-	M 16	29	5	A, C, D, E, F			
Shell tp. mill. cutt. bodies 0° axial rake angle														
	4 42 310	42	12	6	43	3	-	diam. 16	35	4	A, B, C, D, E, F			
	5 42 310	42	12	6	43	3	-	diam. 16	35	5	A, C, D, E, F			
	52 310	52	12	6	53	3.5	-	diam. 22	40	5	A, B, C, D, E, F			
Thr. sh. end mill bodies 7° pos. rake angle														
	3 35 200/7	35	12	6	42.5	3	-	M 16	29	3	A, B, C, D, E, F			
	4 35 200/7	35	12	6	42.5	3	-	M 16	29	4	A, C, D, E, F			

Milling cutter bodies

Milling cutter bodies	Catalogue no.										Accessories		Features
	d_1	d	r	l_3	l_2	l_1	d_2	d_3	z				

Shell tp. mill. cutt. bodies | 7° pos. rake angle

	Catalogue no.	d_1	d	r	l_3	l_2	l_1	d_2	d_3	z	Accessories	Features
	5 42 310/7	42	12	6	42.6	3.8	-	diam. 16	35	5	A, B, C, D, E, F	
	52 310/7	52	12	6	52.5	3.5	-	diam. 22	40	5	A, B, C, D, E, F	
	66 310/7	66	12	6	52.5	3.5	-	diam. 27	48	6	A, B, D, E, F	
	80 310/7	80	12	6	52.5	3.5	-	diam. 27	60	7	A, B, D, E, F	

Accessories

<p>35 500 Torx screw A > Page 195</p>	<p>35 510 locking screw B > Page 195</p>	<p>15 500 Torx-screwdriver C > Page 196</p>	<p>TV 2-8 Screwdriver torque Vario®-S with window scale, D > Page 197</p>	<p>T15 500 Torx interchangeable bit for Torque Vario® E > Page 197</p>	<p>T15 502, Torx Magic- Spring compatible bit f. Torque Vario® F > Page 198</p>
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Indexable inserts

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

Extended operation data

Plunging	
Cutter diam. d1	X _{max}
24-80	3

Ramping		
Cutter diam. d1	α°	y
24	-	-
35	<13,0	13
42	<6,5	20
52	<5,7	30
66	<3,9	44
80	<3,0	58

Helix		
Cutter diam. d1	D _{min}	D _{max}
24	26	48
35	46	70
42	62	84
52	82	104
66	110	132
80	136	160