



UNIWORX® PLUS

diam. 10 - 20 mm - r 0.5 | r 1.0

New UNIWORX®PLUS corner radius- and HighFeed end mills for roughing and finishing steel

- Roughing, stock material machining with HighFeed inserts
- precision grinded corner radius inserts for high end finishing
- asymmetrical contact flats for error-free positioning
- unique coolant supply with fan opening through the insert

Milling cutter bodies

	Catalogue no.	Dimensions										Accessories	Features		
		d ₁	d	r	l ₃	l ₂	l ₁	d ₂	d ₃	z					
DuoPlug®															
	10 215 SG	10	10	0.5	27	-	-	M 7	9.6	2	A, D, I, J, M	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	12 215 SG	12	12	0.5	30	-	-	M 7	10.8	2	B, E, G, K, N	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	16 215 SG	16	16	1	38	-	-	M 10	15	2	C, F, H, L, O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	20 215 SG	20	20	1	43	-	-	M 12	18.5	2	C, F, H, L, O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

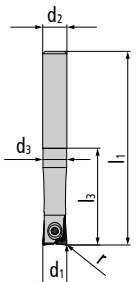
Threaded shank end mill bodies

	Catalogue no.	Dimensions										Accessories	Features		
		d ₁	d	r	l ₃	l ₂	l ₁	d ₂	d ₃	z					
Threaded shank end mill bodies															
	10 215 M6	10	10	0.5	20	-	-	M 6	9.75	2	A, D, I, J, M	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	12 215 M6	12	12	0.5	20	-	-	M 6	11.5	2	B, E, G, K, N	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	16 215	16	16	1	25	-	-	M 8	13.8	2	C, F, H, L, O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	20 215	20	20	1	30	-	-	M 10	18	2	C, F, H, L, O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Milling cutter bodies

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

Plain shank end mill bodies



40 10 115 G	10	10	0.5	40	-	-	diam. 10	9.8	2	A, D, I, J, M	
48 12 115 G	12	12	0.5	48	-	-	diam. 12	11.8	2	B, E, G, K, N	
64 16 115 G	16	16	1	64	-	-	diam. 16	13.8	2	C, F, H, L, O	
80 20 115 G	20	20	1	80	-	-	diam. 20	18	2	C, F, H, L, O	

Accessories

30 530 locating screw A > Page ???	35 530 locating screw B > Page ???	50 530 locating screw C > Page ???	POKOLM 08 500 Torx-screwdriver D > Page 196	POKOLM 10 500 Torx-screwdriver E > Page 196	POKOLM 20 500 Torx-screwdriver F > Page 196
TV 1-5 Screwdriver torque Vario®-S with window scale G > Page 197	TV 2-8 Screwdriver torque Vario®-S with window scale H > Page 197	TV 08-2 Screwdriver torque Vario®-S with window scale I > Page 197	T8 500 Torx interchangeable bit for Torque Vario® J > Page 197	T10 500 Torx interchangeable bit for Torque Vario® K > Page 197	T20 500 Torx interchangeable bit for Torque Vario® L > Page 197
T8 502 Torx MagicSpring compatible bit f. Torque Vario® M > Page 198	T10 502 Torx MagicSpring compatible bit f. Torque Vario® N > Page 198	T20 502 Torx MagicSpring compatible bit f. Torque Vario® O > Page 198			

Indexable inserts

Catalogue no. DIN Specification Carbide Grade Coating d s r M

	15 10 8060 R05	XOGX 102505 ER	K10	PPTi	10	2.5	0.5	M 3.0
	15 12 8060 R05	XOGX 122505 ER	K10	PPTi	12	2.5	0.5	M 3.5
	15 16 8060 R10	XOGX 163010 ER	K10	PPTi	16	3	1	M 5.0
	15 20 8060 R10	XOGX 203010 ER	K10	PPTi	20	3	1	M 5.0

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.						
d=10 mm							
K10 PPTi	f _z (mm)	0,05-0,3	0,05-0,15	0,05-0,35	0,05-0,5	0,05-0,12	0,05-0,25
	a _p (mm)	0,05-0,6	0,05-0,2	0,05-0,5	0,05-1,2	0,05-0,15	0,05-0,3
d=12 mm							
K10 PPTi	f _z (mm)	0,05-0,35	0,05-0,15	0,05-0,4	0,05-0,55	0,05-0,15	0,05-0,25
	a _p (mm)	0,05-0,7	0,05-0,3	0,05-0,6	0,05-1,3	0,05-0,2	0,05-0,35
d=16 mm							
K10 PPTi	f _z (mm)	0,05-0,35	0,05-0,15	0,05-0,4	0,05-0,55	0,05-0,15	0,05-0,25
	a _p (mm)	0,05-0,8	0,05-0,3	0,05-0,8	0,05-1,5	0,05-0,2	0,05-0,4
d=20 mm							
K10 PPTi	f _z (mm)	0,05-0,35	0,05-0,15	0,05-0,4	0,05-0,55	0,05-0,15	0,05-0,25
	a _p (mm)	0,05-1	0,05-0,3	0,05-1	0,05-1,8	0,05-0,2	0,05-0,42

Cutting speed (Vc in m/min)

Material		steel	stainless steel	cast iron	non-ferrous materials	high-temperature alloys	hardened steel
Quality Coating	Application						
K10 PPTi	roughing	-	-	-	-	-	-
	pre finishing	▽110 160 210	▽100 165 230	▽140 205 270	▽200 450 700	▽40 75 110	▽80 130 180
	finishing	▽120 210 300	▽170 240 310	▽300 550 800			▽100 150 200