

**Garant**
**PCD torus cutter with internal cooling 209804, PCD, Ø e8 DC / R1: 5/0,5mm**

**Order data**

Order number	209635 5/0,5
GTIN	4045197513403
Item class	11Y

**Description**
**Version:**

**High performance PCD slot drill** for the **highest demands in respect to material removal rates** when machining **GRP, CRP** and **graphite**.

**Straight flutes** for a neutral cut.

Tolerance for corner radius  $R_1 = \pm 0.01$  mm.

No. of teeth Z: 2

Shank: DIN 6535 HA to h6

No. of teeth Z: 2

Flute length  $L_c$ : 3 mm

Corner radius  $R_1$ : 0.5 mm

Overhang length  $L_1$  incl. recess: 18 mm

Recess Ø  $D_1$ : 4.6 mm

Overall length L: 54 mm

**Technical description**

Feed $f_z$ for copy milling in graphite	0.12 mm
Feed $f_z$ for side milling in graphite	0.07 mm
Overhang length $L_1$ incl. recess	18 mm
Feed $f_z$ for copy milling in GRP CRP	0.07 mm
Recess Ø $D_1$	4.6 mm
Cutting edge Ø $D_c$	5 mm
Feed $f_z$ for side milling in GRP CRP	0.04 mm
No. of teeth Z	2

Corner radius $R_1$	0.5 mm
Shank $\varnothing D_s$	6 mm
Flute length $L_c$	3 mm
Overall length $L$	54 mm
Shank	DIN 6535 HA to h6
Coating	PCD
Tool material	PCD
Standard	Manufacturer's standard
Tolerance nominal $\varnothing$	e8
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	0.05×D for copy milling
Cutting width $a_e$ for milling operation	0.2×D for side milling
Through-coolant	yes
Shank tolerance	h6
Colour ring	black
Type of product	Torus cutter

## User data

	Suitability	$V_c$	ISO code
Aluminium	suitable	2400 m/min	N
Aluminium (short chipping)	suitable	2000 m/min	N
Alu > 10% Si	suitable	1500 m/min	N
PMMA acrylic	suitable	1000 m/min	N
PE-HD	suitable	900 m/min	N
PA 66	suitable	900 m/min	N
PEEK	suitable	800 m/min	N
PVDF GF20	suitable	1200 m/min	N
POM GF25	suitable	1200 m/min	N

PA 66 GF30	suitable	1000 m/min	N
PEEK GF30	suitable	1000 m/min	N
PTFE CF25	suitable	1000 m/min	N
PEEK CF30	suitable	800 m/min	N
Hybrids	suitable		
MMC	suitable	400 m/min	N
GRP	suitable	500 m/min	N
CRP	suitable	500 m/min	N
wet maximum	suitable		
wet minimum	suitable		
dry	Suitable		
Air	suitable		
<b>Services</b>			

Shank grinding Type HB

129100 HB