

**Garant**
**Solid carbide torus cutter R1 0.1, Diamond, Ø DC × L1: 0,4X8 mm**

**Order data**

Order number	209716 0,4X8
GTIN	4045197918017
Item class	11Y

**Description**
**Version:**

With **crystalline diamond sp<sup>3</sup> coating**. For the **highest demands regarding performance and precision** in fibre-reinforced composites, CRP, GRP, and graphite. **Extremely tight tolerances** ensure maximum accuracy. Double relief ground with 2 hollow-ground chamfers. **Recess angle  $\alpha = 16^\circ$** .

Tolerances:

- **Corner radius:  $R_1 = \pm 0.0025$  mm**
- **Neck Ø:  $D_1 = 0 / -0.01$  mm**

**Note:**

At greater tool overhang lengths, use a reduced value for  $a_p$ !

Values for:

copying:  $a_p = 0.10 \times D \times a_{p, \text{korr}}$

side milling:  $a_p = 0.20 \times D \times a_{p, \text{korr}}$

**To calculate the feed rate  $vf$  please use the actual speed of the machine (the maximum possible speed)!**

e.g:  $vf = 18000$  [rpm] ×  $fz$  [mm/Z] ×  $z$

No. of teeth  $Z$ : 2

Helix angle: 25 degrees

Shank: DIN 6535 HA to h5

No. of teeth  $Z$ : 2

Flute length  $L_c$ : 0.4 mm

Corner radius  $R_1$ : 0.1 mm

Overhang length  $L_1$  incl. recess: 8 mm

Recess Ø  $D_1$ : 0.38 mm

Overall length  $L$ : 50 mm

**Technical description**

No. of teeth Z	2
Corner radius R <sub>1</sub>	0.1 mm
Shank Ø D <sub>s</sub>	4 mm
Recess Ø D <sub>1</sub>	0.38 mm
Feed f <sub>z</sub> for side milling in graphite	0.007 mm
Cutting edge Ø D <sub>c</sub>	0.4 mm
Overhang length L <sub>1</sub> incl. recess	8 mm
Shank	DIN 6535 HA to h5
Flute length L <sub>c</sub>	0.4 mm
Overall length L	50 mm
Feed f <sub>z</sub> for copy milling in graphite	0.007 mm
Helix angle	25 degrees
Correction factor a <sub>p corr</sub>	0.08
Coating	Diamond
Tool material	Solid carbide
Standard	Manufacturer's standard
Tolerance nominal Ø	0 / -0.005
Direction of infeed	horizontal, oblique and vertical
Cutting width a <sub>e</sub> for milling operation	0.05×D for copy milling
Cutting width a <sub>e</sub> for milling operation	0.5×D for side milling
Through-coolant	no
Colour ring	black
Type of product	End mill