

**Garant**
**Solid carbide torus cutter R1 0.05, Diamond, Ø DC × L1: 0,2X1 mm**

**Order data**

Order number	209714 0,2X1
GTIN	4045197912367
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:  $RS_1 = \pm 0.0025\text{mm}$**
- **Neck Ø:  $D_4 = 0 / -0.01\text{ mm}$**

**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:  $vf = 18000 [\text{rpm}] \times fz [\text{mm/Z}] \times z$

No. of teeth Z: 2

Helix angle: 25 degrees

Shank: DIN 6535 HA to h5

No. of teeth Z: 2

Flute length  $L_c$ : 0.2 mm

Corner radius  $R_1$ : 0.05 mm

Overhang length  $L_1$  incl. recess: 1 mm

Recess Ø  $D_1$ : 0.18 mm

Overall length L: 50 mm

**Technical description**

Feed $f_z$ for copy milling in graphite	0.012 mm
Overall length L	50 mm
Overhang length $L_1$ incl. recess	1 mm
No. of teeth Z	2
Flute length $L_c$	0.2 mm
Recess $\varnothing D_1$	0.18 mm
Feed $f_z$ for side milling in graphite	0.012 mm
Corner radius $R_1$	0.05 mm
Shank $\varnothing D_s$	4 mm
Cutting edge $\varnothing D_c$	0.2 mm
Shank	DIN 6535 HA to h5
Helix angle	25 degrees
Correction factor $a_{p\text{ korr}}$	1
Coating	Diamond
Tool material	Solid carbide
Standard	Manufacturer's standard
Tolerance nominal $\varnothing$	0 / -0.005
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	0.5×D for side milling
Through-coolant	no
Colour ring	black
Type of product	End mill