

Garant
Solid carbide torus cutter R1 0.1, Diamond, Ø DC × L1: 2X40 mm

Order data

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|--------------|---------------|
| Order number | 209716 2X40 |
| GTIN | 4045197918338 |
| Item class | 11Y |

Description
Version:

With **crystalline diamond sp³ 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: 30 degrees

Shank: DIN 6535 HA to h5

No. of teeth Z : 2

Flute length L_c : 2 mm

Corner radius R_1 : 0.1 mm

Overhang length L_1 incl. recess: 40 mm

Recess Ø D_1 : 1.91 mm

Overall length L : 80 mm

Technical description

| | |
|---|----------------------------------|
| Feed f_z for side milling in graphite | 0.025 mm |
| No. of teeth Z | 2 |
| Shank | DIN 6535 HA to h5 |
| Cutting edge $\varnothing D_c$ | 2 mm |
| Overall length L | 80 mm |
| Feed f_z for copy milling in graphite | 0.025 mm |
| Corner radius R_1 | 0.1 mm |
| Shank $\varnothing D_s$ | 4 mm |
| Recess $\varnothing D_1$ | 1.91 mm |
| Overhang length L_1 incl. recess | 40 mm |
| Flute length L_c | 2 mm |
| Helix angle | 30 degrees |
| Correction factor $a_{p\text{ corr}}$ | 0.08 |
| 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 |