

Garant
Solid carbide micro slot drill, Diamond, Ø DC × L1: 1X20 mm

Order data

| | |
|--------------|---------------|
| Order number | 209700 1X20 |
| GTIN | 4045197917218 |
| 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:

· **Neck Ø: $D_1 = 0 / -0.01$ mm.**

Note:

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

Values for:

slots milled from solid: $a_p = 0.1 \times D \times a_{p \text{ korr}}$

side milling: $a_p = 0.2 \times D \times a_{p \text{ korr}}$

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

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

Through-coolant: no

Tolerance nominal Ø: $0 / -0.005$

No. of teeth Z: 2

Helix angle: 30 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HA to h5

No. of teeth Z: 2

Flute length L_c : 1.5 mm

Overhang length L_1 incl. recess: 20 mm

Recess Ø D_1 : 0.95 mm

Overall length L: 60 mm

Shank Ø D_s : 4 mm

Technical description

| | |
|---|----------------------------------|
| Direction of infeed | horizontal, oblique and vertical |
| Feed f_z for slot milling in graphite | 0.016 mm |
| Feed f_z for side milling in graphite | 0.02 mm |
| Recess $\varnothing D_1$ | 0.95 mm |
| No. of teeth Z | 2 |
| Flute length L_c | 1.5 mm |
| Shank $\varnothing D_s$ | 4 mm |
| Tolerance nominal \varnothing | 0 / -0.005 |
| Shank | DIN 6535 HA to h5 |
| Overall length L | 60 mm |
| Cutting edge $\varnothing D_c$ | 1 mm |
| Overhang length L_1 incl. recess | 20 mm |
| Helix angle | 30 degrees |
| Correction factor $a_{p,corr}$ | 0.08 |
| Corner chamfer angle | 90 degrees |
| Coating | Diamond |
| Tool material | Solid carbide |
| Standard | Manufacturer's standard |
| Cutting width a_e for milling operation | 0.5×D for side milling |
| Cutting width a_e for milling operation | Full slot cutting depth 1×D |
| Through-coolant | no |
| Colour ring | black |
| Type of product | End mill |