

Garant
Solid carbide micro slot drill, Diamond, Ø DC × L1: 2X50mm

Order data

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|--------------|---------------|
| Order number | 209700 2X50 |
| GTIN | 4045197917478 |
| 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: $vf = 18000 \text{ [rpm]} \times fz \text{ [mm/Z]} \times z$

Technical description

| | |
|---|----------|
| Feed f_z for side milling in graphite | 0.025 mm |
| Recess Ø D_1 | 1.91 mm |
| Overall length L | 90 mm |
| Overhang length L_1 incl. recess | 50 mm |
| Cutting edge Ø D_c | 2 mm |
| Flute length L_c | 3 mm |

| | |
|---|----------------------------------|
| Shank $\varnothing D_s$ | 4 mm |
| No. of teeth Z | 2 |
| Feed f_z for slot milling in graphite | 0.02 mm |
| Tolerance nominal \varnothing | 0 / -0.005 |
| Shank | DIN 6535 HA to h5 |
| Direction of infeed | horizontal, oblique and vertical |
| 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 / face mill |

User data

| | Suitability | V_c | ISO code |
|--------------------|-------------|-----------|----------|
| PVDF GF20 | suitable | 200 m/min | N |
| POM GF25 | suitable | 190 m/min | N |
| PA 66 GF30 | suitable | 170 m/min | N |
| PEEK GF30 | suitable | 150 m/min | N |
| PTFE CF25 | suitable | 180 m/min | N |
| PEEK CF30 | suitable | 160 m/min | N |
| Hybrids | suitable | | |
| Honeycomb sandwich | suitable | 350 m/min | N |
| GRP | suitable | 190 m/min | N |

| | | | |
|-------------|----------|-----------|---|
| GRP, CRP | suitable | 190 m/min | N |
| Graphite | suitable | 340 m/min | N |
| wet minimum | suitable | | |
| dry | suitable | | |
| Air | suitable | | |