

**Garant**
**Solid carbide micro slot drill, Diamond, Ø DC × L1: 0,3X1 mm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 209700 0,3X1  |
| GTIN         | 4045197916907 |
| 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:

· **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: 25 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HA to h5

No. of teeth Z: 2

Flute length  $L_c$ : 0.4 mm

Overhang length  $L_1$  incl. recess: 1 mm

Recess Ø  $D_1$ : 0.28 mm

Overall length L: 45 mm

Shank Ø  $D_s$ : 4 mm

## Technical description

|   |                                  |
|---|----------------------------------|
| Recess $\varnothing D_1$                  | 0.28 mm                          |
| Tolerance nominal $\varnothing$           | 0 / -0.005                       |
| Flute length $L_c$                        | 0.4 mm                           |
| Shank                                     | DIN 6535 HA to h5                |
| No. of teeth Z                            | 2                                |
| Overall length L                          | 45 mm                            |
| Cutting edge $\varnothing D_c$            | 0.3 mm                           |
| Overhang length $L_1$ incl. recess        | 1 mm                             |
| Shank $\varnothing D_s$                   | 4 mm                             |
| Feed $f_z$ for slot milling in graphite   | 0.012 mm                         |
| Feed $f_z$ for side milling in graphite   | 0.016 mm                         |
| Direction of infeed                       | horizontal, oblique and vertical |
| Helix angle                               | 25 degrees                       |
| Correction factor $a_{p\text{corr}}$      | 1                                |
| 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                         |