

Garant
Solid carbide micro slot drill, Diamond, Ø DC × L1: 1X4 mm

Order data

Order number	209700 1X4
GTIN	4045197917164
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: 4 mm

Recess Ø D_1 : 0.95 mm

Overall length L: 45 mm

Shank Ø D_s : 4 mm

Technical description

Direction of infeed	horizontal, oblique and vertical
Overhang length L_1 incl. recess	4 mm
Feed f_z for slot milling in graphite	0.025 mm
Recess $\varnothing D_1$	0.95 mm
No. of teeth Z	2
Shank $\varnothing D_s$	4 mm
Cutting edge $\varnothing D_c$	1 mm
Shank	DIN 6535 HA to h5
Tolerance nominal \varnothing	0 / -0.005
Flute length L_c	1.5 mm
Overall length L	45 mm
Feed f_z for side milling in graphite	0.03 mm
Helix angle	30 degrees
Correction factor $a_{p,corr}$	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