

Garant**Solid carbide copy slot drill, Diamond, Ø DC × L1: 1X3mm****Order data**

Order number	209790 1X3
GTIN	4045197476548
Item class	11Y

Description**Version:**

With the latest generation of **crystalline diamond coating sp³**, for process reliability in machining **fibre-reinforced composites, CRP, GRP, and graphite**. High precision version in respect of concentricity and all tolerances. Solid carbide copy mill, full radius.

Recess angle $\alpha = 16^\circ$.

Tolerances:

- **Corner radius: Radius contour = ± 0.005 mm.**
- **Neck Ø: $D_1 = 0 / -0.02$ mm.**

Note:

Correction factor for v_c depends on dimension L_4 .

Technical description

Cutting edge Ø D_c	1 mm
Feed f_z for copy milling in graphite	0.0108 mm
Overhang length L_1 incl. recess	3 mm
Cutting speed v_c in graphite	326 m/min
No. of teeth Z	2
Recess Ø D_1	0.96 mm
Shank Ø D_s	4 mm
Overall length L	45 mm
Flute length L_c	0.8 mm
Correction factor for v_c	1.25

Data sheet

Helix angle	30 degrees
Radius R	0.5 mm
Coating	Diamond
Tool material	Solid carbide
Standard	Manufacturer's standard
Tolerance nominal Ø	0 / -0.01
Direction of infeed	horizontal, oblique and vertical
Cutting width a_e for milling operation	0.05×D for copy milling
Shank	DIN 6535 HA with h5
Colour ring	black
Type of product	Ball-nosed slot drill

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, CRP	suitable	190 m/min	N
Graphite	suitable	340 m/min	N
wet maximum	suitable		
wet minimum	suitable		
dry	suitable only under restricted conditions		
Air	suitable		

