

**Garant****Solid carbide copy slot drill, Diamond, Ø DC × L1: 0,5X6mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 209790 0,5X6  |
| GTIN         | 4045197476364 |
| Item class   | 11Y           |

**Description****Version:**

With the latest generation of **crystalline diamond coating sp<sup>3</sup>**, 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 =  $\pm 0.005$  mm.**
- **Neck Ø:  $D_1 = 0 / -0.02$  mm.**

**Note:**

Correction factor for  $v_c$  depends on dimension  $L_4$ .

**Technical description**

|                                         |           |
|-----------------------------------------|-----------|
| Cutting speed $v_c$ in graphite         | 194 m/min |
| Cutting edge Ø $D_c$                    | 0.5 mm    |
| Feed $f_z$ for copy milling in graphite | 0.0021 mm |
| No. of teeth Z                          | 2         |
| Recess Ø $D_1$                          | 0.47 mm   |
| Overhang length $L_1$ incl. recess      | 6 mm      |
| Shank Ø $D_s$                           | 4 mm      |
| Overall length L                        | 45 mm     |
| Flute length $L_c$                      | 0.4 mm    |
| Correction factor for $v_c$             | 1.25      |

## Data sheet

|                                           |                                  |
|-------------------------------------------|----------------------------------|
| Helix angle                               | 30 degrees                       |
| Radius R                                  | 0.25 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                                  |           |          |

