

**Garant**
**Solid carbide high precision ball nose slot drill, DLC, Ø DC: 3mm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 207097 3      |
| GTIN         | 4045197854766 |
| Item class   | 11X           |

**Description**
**Version:**

With **DLC coating sp<sup>2</sup>** of the latest generation.

**High precision ball nose slot drills** in respect of **radius Ø and contour variations within the µm range.**

Tolerances: radius contour = **±0.005 mm.**

For the highest demands on dimensional accuracy of the workpiece.

**Note:**

**Successor product to No. 207095.**

**Technical description**

|  |            |
|--|------------|
| Cutting edge Ø D <sub>c</sub>                                    | 3 mm       |
| Flute length L <sub>c</sub>                                      | 6 mm       |
| Recess Ø D <sub>1</sub>  | 2.7 mm     |
| No. of teeth Z   | 2          |
| Overall length L   | 50 mm      |
| Shank Ø D <sub>s</sub>   | 3 mm       |
| Feed f <sub>z</sub> for copy milling in short-chipping aluminium | 0.03 mm    |
| Overhang length L <sub>1</sub> incl. recess                      | 16 mm      |
| Helix angle  | 45 degrees |
| Radius R   | 1.5 mm     |
| Coating  | DLC        |

|   |                                  |
|---|----------------------------------|
| Tool material                             | Solid carbide                    |
| Standard                                  | Manufacturer's standard          |
| Type                                      | W                                |
| Tolerance nominal $\varnothing$           | -0.007 / 0.002                   |
| Direction of infeed                       | horizontal, oblique and vertical |
| Cutting width $a_e$ for milling operation | 0.03×D for copy milling          |
| Shank                                     | DIN 6535 HA to h6                |
| Balance quality with shank                | G 2.5 with HA                    |
| Through-coolant                           | no                               |
| Colour ring                               | yellow                           |
| Type of product                           | Ball-nosed slot drill            |

## User data

|                            | Suitability | $V_c$     | ISO code |
|----------------------------|-------------|-----------|----------|
| Aluminium                  | Suitable    | 600 m/min | N        |
| Aluminium (short chipping) | suitable    | 550 m/min | N        |
| Alu > 10% Si               | suitable    | 500 m/min | N        |
| PMMA acrylic               | Suitable    | 220 m/min | N        |
| PE-HD                      | Suitable    | 180 m/min | N        |
| PA 66                      | Suitable    | 220 m/min | N        |
| PEEK                       | Suitable    | 170 m/min | N        |
| PF 31                      | Suitable    | 150 m/min | N        |
| PVDF GF20                  | Suitable    | 200 m/min | N        |
| POM GF25                   | Suitable    | 180 m/min | N        |
| PA 66 GF30                 | Suitable    | 170 m/min | N        |
| PEEK GF30                  | Suitable    | 140 m/min | N        |
| PTFE CF25                  | Suitable    | 180 m/min | N        |

|                    |   |           |   |
|--------------------|---|-----------|---|
| Honeycomb sandwich | suitable only under restricted conditions | 320 m/min | N |
| Cu                 | Suitable                                  | 180 m/min | N |
| CuZn               | Suitable                                  | 220 m/min | N |
| wet maximum        | suitable                                  |           |   |
| wet minimum        | Suitable                                  |           |   |
| dry                | suitable only under restricted conditions |           |   |
| Air                | Suitable                                  |           |   |