

**Garant**
**GARANT Master Alu solid carbide slot drill HPC, DLC, Ø e8 DC: 12Kmm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 201075 12K    |
| GTIN         | 4062406186678 |
| Item class   | 11Z           |

**Description**
**Version:**

**Precision balanced tools**, ideally suited for use on **high-speed spindles**. Special geometry for optimum chip evacuation thanks to **newly developed balancing process**. Very smooth cutting action for **outstanding surface quality**.

**Technical description**

|   |                                  |
|---|----------------------------------|
| Cutting edge $\varnothing D_c$                          | 12 mm                            |
| No. of teeth Z  | 1                                |
| Direction of infeed                                     | horizontal, oblique and vertical |
| Shank   | Plain shank                      |
| Feed $f_z$ for side milling in short-chipping aluminium | 0.14 mm                          |
| Helix angle   | 30 degrees                       |
| Feed $f_z$ for slot milling in short-chipping aluminium | 0.12 mm                          |
| Recess $\varnothing D_1$                                | 11 mm                            |
| Tolerance nominal $\varnothing$                         | e8                               |
| Balance quality with shank                              | G 1.8 with HA                    |
| Overall length L  | 60 mm                            |
| Overhang length $L_1$ incl. recess                      | 19 mm                            |
| Flute length $L_c$                                      | 12 mm                            |

|   |                                      |
|---|--------------------------------------|
| Shank $\varnothing D_s$                   | 12 mm                                |
| Corner chamfer angle                      | 90 degrees                           |
| Series                                    | Master Alu                           |
| Coating                                   | DLC                                  |
| Tool material                             | Solid carbide                        |
| Standard                                  | Manufacturer's standard              |
| Type                                      | W                                    |
| Cutting width $a_e$ for milling operation | Full slot cutting depth $1 \times D$ |
| Cutting width $a_e$ for milling operation | Full slot cutting depth $1 \times D$ |
| Through-coolant                           | no                                   |
| Machining strategy                        | HPC                                  |
| Colour ring                               | yellow                               |
| Type of product                           | End / face mill                      |

## User data

|                            | Suitability | $V_c$     | ISO code |
|----------------------------|-------------|-----------|----------|
| Alu plastics               | suitable    | 480 m/min | N        |
| Aluminium (short chipping) | suitable    | 440 m/min | N        |
| Alu > 10% Si               | suitable    | 400 m/min | N        |
| PMMA acrylic               | Suitable    | 200 m/min | N        |
| PE-HD                      | Suitable    | 160 m/min | N        |
| PA 66                      | Suitable    | 200 m/min | N        |
| PEEK                       | Suitable    | 150 m/min | N        |
| PF 31                      | Suitable    | 130 m/min | N        |
| PVDF GF20                  | Suitable    | 180 m/min | N        |
| POM GF25                   | Suitable    | 160 m/min | N        |
| PA 66 GF30                 | Suitable    | 150 m/min | N        |
| PEEK GF30                  | Suitable    | 130 m/min | N        |

|                        |   |           |           |
|------------------------|---|-----------|-----------|
| PTFE CF25              | Suitable                                  | 160 m/min | N         |
| Honeycomb sandwich     | suitable only under restricted conditions | 300 m/min | N         |
| Cu                     | Suitable                                  | 160 m/min | N         |
| CuZn                   | Suitable                                  | 200 m/min | N         |
| wet maximum            | suitable                                  |           |           |
| wet minimum            | suitable only under restricted conditions |           |           |
| dry                    | suitable only under restricted conditions |           |           |
| <b>Air Services</b>    | Suitable                                  |           |           |
| Shank grinding Type HB |   |           | 129100 HB |