

**Garant****GARANT Master Steel solid carbide high-performance drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7: 3,3mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 123240 3,3    |
| GTIN         | 4069515030281 |
| Item class   | 11E           |

**Description****Version:**

**Robust drill design and optimised special point geometry** for the **best possible chip formation and reliable chip breakage** with **higher feed rates at the same time**. **Advanced micro-geometry, convex** cutting edge and **conical profile grinding** to provide additional stability for the main cutting edge. **Optimised flute geometry and patented face geometry** for **reliable chip evacuation** in steel materials and cast material. **High-performance coating** of the latest generation.

**Note:**

Flute length  $L_c = L_2 + 1.5 \times D_c$ .

For process reliability when using the 12xD drill, an initial centre drilling with No. 121068 – 121130 is recommended.

**HB** and **HE** shanks are available at the same price as HA.

For **HB shanks**: use order **no. 123241**.

For **HE shanks**: use order **No. 123240 + 129100HE**.

**Technical description**

|                                          |                |
|------------------------------------------|----------------|
| Shank Ø $D_s$                            | 6 mm           |
| Standard                                 | Works standard |
| Tolerance nominal Ø                      | h7             |
| Overall length L                         | 92 mm          |
| recommended maximum drilling depth $L_2$ | 49.1 mm        |
| Flute length $L_c$                       | 54 mm          |

## Data sheet

|                                          |                   |
|------------------------------------------|-------------------|
| Feed f in steel < 1100 N/mm <sup>2</sup> | 0.12 mm/rev.      |
| Number of cutting edges Z                | 2                 |
| Nominal Ø D <sub>c</sub>                 | 3.3 mm            |
| Series                                   | Master Steel      |
| Coating                                  | TiAlN             |
| Tool material                            | Solid carbide     |
| Version                                  | 12xD              |
| Point angle                              | 135 degrees       |
| Shank                                    | DIN 6535 HA to h6 |
| Through-coolant                          | yes, with 25 bar  |
| Machining strategy                       | HPC               |
| Semi-Standard                            | yes               |
| Type of product                          | Jobber drill      |

## User data

|                                | Suitability | V <sub>c</sub> | ISO code |
|--------------------------------|-------------|----------------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable    | 130 m/min      | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable    | 120 m/min      | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable    | 110 m/min      | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable    | 100 m/min      | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable    | 80 m/min       | P        |
| GG(G)                          | suitable    | 95 m/min       | K        |
| Uni                            | suitable    |                |          |
| wet maximum                    | suitable    |                |          |
| wet minimum                    | suitable    |                |          |
| Air                            | suitable    |                |          |

## Suitable products

No Shop URL available for: 123240 3,3

