

**Garant**

**GARANT Master Steel solid carbide HPC drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7: 3mm**


**Order data**

|              |               |
|--------------|---------------|
| Order number | 122470 3      |
| GTIN         | 4067263119593 |
| 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  $L_c = L_2 + 1.5 \times D_c$ .

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

**HB shank:** order with **No. 122471 / 122476**.

**HE shank:** order with **No. 122470 / 122475** and **129100HE**.

**Technical description**

|   |              |
|---|--------------|
| Flute length $L_c$                        | 20 mm        |
| Shank $\varnothing D_s$                   | 6 mm         |
| Feed $f$ in steel $< 1100 \text{ N/mm}^2$ | 0.12 mm/rev. |
| Overall length $L$                        | 62 mm        |
| Nominal $\varnothing D_c$                 | 3 mm         |
| Tolerance nominal $\varnothing$           | h7           |
| Number of cutting edges $Z$               | 2            |

|  |                    |
|--|--------------------|
| recommended maximum drilling depth $L_2$ | 15.5 mm            |
| Standard                                 | DIN 6537 K         |
| Series                                   | Master Steel       |
| Coating                                  | TiAlN              |
| Tool material                            | Solid carbide      |
| Version                                  | 4xD                |
| Point angle                              | 140 degrees        |
| Shank                                    | DIN 6535 HA to h6  |
| Through-coolant                          | no                 |
| Machining strategy                       | HPC                |
| Semi-Standard                            | yes                |
| Colour ring                              | green              |
| Type of product                          | Mono jobber drills |

## User data

|                                | Suitability | $V_c$     | ISO code |
|--------------------------------|-------------|-----------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable    | 115 m/min | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable    | 105 m/min | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable    | 100 m/min | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable    | 70 m/min  | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable    | 60 m/min  | P        |
| GG                             | suitable    | 110 m/min | K        |
| GGG                            | suitable    | 75 m/min  | K        |
| Uni                            | suitable    |           |          |
| wet maximum                    | suitable    |           |          |
| dry                            | suitable    |           |          |