# Garant

## GARANT Master Steel solid carbide HPC drill, plain shank DIN 6535 HA, TiAIN, Ø DC h7: 2,2mm



### Order data

| Order number | 122470 2,2    |  |  |
|--------------|---------------|--|--|
| GTIN         | 4067263119517 |  |  |
| 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**

| Feed f in steel < 1100 N/mm <sup>2</sup> | 0.09 mm/rev. |  |
|------------------------------------------|--------------|--|
| Shank Ø D <sub>s</sub>                   | 4 mm         |  |
| recommended maximum drilling depth $L_2$ | 16.7 mm      |  |
| Flute length L <sub>c</sub>              | 20 mm        |  |
| Standard                                 | DIN 6537 K   |  |
| Number of cutting edges Z                | 2            |  |
| Overall length L                         | 55 mm        |  |

| Tolerance nominal Ø      | h7                 |  |  |
|--------------------------|--------------------|--|--|
| Nominal Ø D <sub>c</sub> | 2.2 mm             |  |  |
| Series                   | Master Steel       |  |  |
| Coating                  | TiAIN              |  |  |
| Tool material            | Solid carbide      |  |  |
| Version                  | 4×D                |  |  |
| 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 <sub>c</sub> | ISO code |
|--------------------------------|-------------|----------------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable    | 115 m/min      | Р        |
| Steel < 750 N/mm <sup>2</sup>  | suitable    | 105 m/min      | Р        |
| Steel < 900 N/mm <sup>2</sup>  | suitable    | 100 m/min      | Р        |
| Steel < 1100 N/mm <sup>2</sup> | suitable    | 70 m/min       | Р        |
| Steel < 1400 N/mm <sup>2</sup> | suitable    | 60 m/min       | Р        |
| GG                             | suitable    | 110 m/min      | К        |
| GGG                            | suitable    | 75 m/min       | К        |
| Uni                            | suitable    |                |          |
| wet maximum                    | suitable    |                |          |
| dry                            | suitable    |                |          |