

# GARANT Master Steel solid carbide high-performance drill, plain shank DIN 6535 HB, TiAIN, Ø DC h7: 10,5mm



#### **Order data**

| Order number | 123241 10,5   |  |  |
|--------------|---------------|--|--|
| GTIN         | 4069515031585 |  |  |
| 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 12×D drill, an initial centre drilling with No. 121068 – 121130 is recommended.

### **Technical description**

| Nominal Ø D <sub>c</sub>                 | 10.5 mm        |  |
|--|----------------|--|
| Feed f in steel < 1100 N/mm <sup>2</sup> | 0.27 mm/rev.   |  |
| Shank Ø D <sub>s</sub>                   | 12 mm          |  |
| Overall length L                         | 204 mm         |  |
| recommended maximum drilling depth $L_2$ | 140.3 mm       |  |
| Tolerance nominal Ø                      | h7             |  |
| Number of cutting edges Z                | 2              |  |
| Standard                                 | Works standard |  |

# Data sheet

| Flute length L <sub>c</sub> | 156 mm            |  |  |
|-----------------------------|-------------------|--|--|
| Series                      | Master Steel      |  |  |
| Coating                     | TiAIN             |  |  |
| Tool material               | Solid carbide     |  |  |
| Version                     | 12×D              |  |  |
| Point angle                 | 135 degrees       |  |  |
| Shank                       | DIN 6535 HB to h6 |  |  |
| Through-coolant             | yes, with 25 bar  |  |  |
| Machining strategy          | HPC               |  |  |
| Semi-Standard               | yes               |  |  |
| Colour ring                 | green             |  |  |
| Type of product             | Jobber drill      |  |  |

## **User data**

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