

**Garant**

**GARANT Master Steel solid carbide high-performance drill DIN 6535 HA, TiAlN, Ø DC h7: 13,5mm**



## Order data

|              |               |
|--------------|---------------|
| Order number | 122761 13,5   |
| GTIN         | 4067263121886 |
| 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 **relieved coneto** 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 shanks:** order with **No. 122762**.

For **HE shanks:** use order **No. 122761 + 129100HE**.

## Technical description

|                                          |              |
|------------------------------------------|--------------|
| Tolerance nominal Ø                      | h7           |
| recommended maximum drilling depth $L_2$ | 56.8 mm      |
| Number of cutting edges Z                | 2            |
| Flute length $L_c$                       | 77 mm        |
| Feed f in steel < 1100 N/mm <sup>2</sup> | 0.37 mm/rev. |
| Shank Ø $D_s$                            | 14 mm        |
| Nominal Ø $D_c$                          | 13.5 mm      |

|                    |                   |
|--------------------|-------------------|
| Overall length L   | 124 mm            |
| Standard           | DIN 6537          |
| Series             | Master Steel      |
| Coating            | TiAlN             |
| Tool material      | Solid carbide     |
| Version            | 6×D               |
| Point angle        | 140 degrees       |
| Shank              | DIN 6535 HA 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                               | V <sub>c</sub> | ISO code |
|--------------------------------|-------------------------------------------|----------------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 170 m/min      | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 155 m/min      | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 145 m/min      | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 130 m/min      | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 110 m/min      | P        |
| Steel < 55 HRC                 | suitable                                  | 60 m/min       | H        |
| INOX < 900 N/mm <sup>2</sup>   | suitable only under restricted conditions | 55 m/min       | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable only under restricted conditions | 45 m/min       | M        |
| GG                             | suitable                                  | 130 m/min      | K        |
| GGG                            | suitable                                  | 90 m/min       | K        |
| Uni                            | suitable                                  |                |          |

|             |          |
|-------------|----------|
| wet maximum | suitable |
| wet minimum | suitable |
| Air         | suitable |