

**Garant****GARANT Master Steel solid carbide high-performance drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7: 18,9mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 122761 18,9   |
| GTIN         | 4069515041690 |
| 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 cone** 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 shanks:** order with **No. 122762**.

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

Articles with prices in brackets: Delivery time approx. 8 weeks, minimum order quantity 3 pieces.

**Technical description**

|                                           |              |
|-------------------------------------------|--------------|
| recommended maximum drilling depth $L_2$  | 72.5 mm      |
| Feed $f$ in steel $< 1100 \text{ N/mm}^2$ | 0.43 mm/rev. |
| Nominal Ø $D_c$                           | 18.9 mm      |
| Flute length $L_c$                        | 110.9 mm     |
| Standard                                  | DIN 6537 L   |
| Overall length $L$                        | 155 mm       |
| Tolerance nominal Ø                       | h7           |

## Data sheet

|                           |                   |
|---------------------------|-------------------|
| Shank Ø D <sub>s</sub>    | 20 mm             |
| Number of cutting edges Z | 2                 |
| 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                                  |                |          |

Data sheet

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