

# GARANT Master Steel SPEED solid carbide drill, plain shank DIN 6535 HA, TiAIN, Ø DC h7: 19mm



#### **Order data**

| Order number | 122425 19     |
|--------------|---------------|
| GTIN         | 4045197786418 |
| Item class   | 11E           |

### **Description**

#### **Version:**

Developed for use with **very high cutting speeds**. Outstandingly suitable for machines with **low power output** and high speeds.

- · Clear reduction in cutting forces due to special cutter geometry.
- · Coating for best wear resistance even at high process temperatures.
- · Polished flutes for good chip clearance.

A slim chisel edge and the special arrangement of the 4 guide chamfers ensure high positioning and alignment accuracy. Optimised micro-geometry for increased working life and performance capability.

#### Note:

Flute length  $L_c = L_2 + 1.5 \times D_c$ .

Versions HB and HE supplied at the same price as HA.

Form **HB:** state **No.122426** on the order.

Form **HE**: order with **No.122425** + **129100HE**.

## **Technical description**

| Flute length L <sub>c</sub> | 79 mm |
|-----------------------------|-------|
| Shank tolerance             | h6    |
| Number of cutting edges Z   | 2     |
| Nominal Ø D <sub>C</sub>    | 19 mm |
| ndard DIN 6537 K            |       |
| Tolerance nominal Ø         | h7    |

| Overall length L                                  | 131 mm            |  |
|---|-------------------|--|
| Shank Ø D <sub>s</sub>                            | 20 mm             |  |
| Feed f in steel < 1100 N/mm <sup>2</sup>          | 0.38 mm/rev.      |  |
| recommended maximum drilling depth L <sub>2</sub> | 50.5 mm           |  |
| Series  | Master Steel      |  |
| Coating   | TiAIN             |  |
| Tool material                                     | solid carbide     |  |
| Version   | 4×D               |  |
| Point angle                                       | 135 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                               | <b>V</b> <sub>c</sub> | ISO code |
|--------------------------------|---|-----------------------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 220 m/min             | Р        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 200 m/min             | Р        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 180 m/min             | Р        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 170 m/min             | Р        |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 90 m/min              | Р        |
| INOX < 900 N/mm <sup>2</sup>   | suitable only under restricted conditions | 75 m/min              | М        |
| GG                             | suitable                                  | 160 m/min             | K        |
| GGG                            | suitable                                  | 130 m/min             | K        |
| Uni                            | suitable                                  |                       |          |
| wet maximum                    | suitable                                  |                       |          |

| wet minimum<br>Services | suitable |           |
|-------------------------|----------|-----------|
| Jei vices               |          |           |
| Shank grinding Type HE  |          | 129100 HE |