

# GARANT Master Steel SPEED solid carbide drill, plain shank DIN 6535 HA, TiAIN, Ø DC h7: 4,1mm



#### **Order data**

| Order number | 122415 4,1    |  |  |
|--------------|---------------|--|--|
| GTIN         | 4045197783929 |  |  |
| 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  $L_c = L_2 + 1.5 \times D_c$ .

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

Form **HB:** order with **No. 122416**.

Form **HE**: order with **No. 122415** + **129100HE**.

## **Technical description**

| Standard                                 | DIN 6537 K   |  |  |
|--|--------------|--|--|
| Flute length L <sub>c</sub>              | 24 mm        |  |  |
| Number of cutting edges Z                | 2            |  |  |
| Nominal Ø D <sub>c</sub>                 | 4.1 mm       |  |  |
| Tolerance nominal Ø                      | h7           |  |  |
| Feed f in steel < 1100 N/mm <sup>2</sup> | 0.16 mm/rev. |  |  |

| Shank tolerance                          | h6                |  |  |
|--|-------------------|--|--|
| Shank Ø D <sub>s</sub>                   | 6 mm              |  |  |
| Overall length L                         | 66 mm             |  |  |
| recommended maximum drilling depth $L_2$ | 17.9 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                          | no                |  |  |
| Machining strategy                       | HPC               |  |  |
| Semi-Standard                            | yes               |  |  |
| Colour ring                              | green             |  |  |
| Type of product                          | Jobber drill      |  |  |

## **User data**

|                                | Suitability                               | $\mathbf{V}_{c}$ | ISO code |
|--------------------------------|---|------------------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 170 m/min        | Р        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 150 m/min        | Р        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 120 m/min        | Р        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 110 m/min        | Р        |
| Steel < 1400 N/mm <sup>2</sup> | suitable only under restricted conditions | 60 m/min         | Р        |
| GG                             | suitable                                  | 110 m/min        | K        |
| GGG                            | suitable                                  | 100 m/min        | K        |
| Uni                            | suitable                                  |                  |          |
| wet maximum                    | suitable                                  |                  |          |

# Services

## Data sheet

# **⚠** Hoffmann Group

Shank grinding Type HE

129100 HE