

**Garant**

**GARANT Master Steel SPEED solid carbide drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7: 8,1mm**


**Order data**

|              |               |
|--------------|---------------|
| Order number | 122415 8,1    |
| GTIN         | 4045197784322 |
| 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**

|                                           |              |
|-------------------------------------------|--------------|
| Flute length $L_c$                        | 47 mm        |
| Overall length $L$                        | 89 mm        |
| Tolerance nominal Ø                       | h7           |
| Feed $f$ in steel $< 1100 \text{ N/mm}^2$ | 0.26 mm/rev. |
| Nominal Ø $D_c$                           | 8.1 mm       |
| Shank tolerance                           | h6           |

|                                                   |                   |
|---------------------------------------------------|-------------------|
| Shank Ø D <sub>s</sub>                            | 10 mm             |
| Standard                                          | DIN 6537 K        |
| Number of cutting edges Z                         | 2                 |
| recommended maximum drilling depth L <sub>2</sub> | 34.9 mm           |
| Series                                            | Master Steel      |
| Coating                                           | TiAlN             |
| Tool material                                     | solid carbide     |
| Version                                           | 4xD               |
| 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                               | 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                                  | 150 m/min      | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 120 m/min      | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 110 m/min      | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable only under restricted conditions | 60 m/min       | P        |
| GG                             | suitable                                  | 110 m/min      | K        |
| GGG                            | suitable                                  | 100 m/min      | K        |
| Uni                            | suitable                                  |                |          |
| wet maximum                    | suitable                                  |                |          |

## Services

Shank grinding Type HE

129100 HE