

## Garant

**GARANT Master Steel SPEED solid carbide drill, Weldon shank DIN 6535 HB, TiAlN, Ø DC h7: 7,8mm**



### Order data

|              |               |
|--------------|---------------|
| Order number | 122416 7,8    |
| GTIN         | 4045197790491 |
| Item class   | 11E           |

### Description

#### Version:

Developed for use with **very high cutting speeds**. Outstandingly suitable for machines with **low installed power** 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 point** 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  $L_c = L_2 + 1.5 \times D_c$ .

### Technical description

|  |              |
|--|--------------|
| Nominal Ø $D_c$                          | 7.8 mm       |
| Overall length L                         | 79 mm        |
| Feed f in steel < 1100 N/mm <sup>2</sup> | 0.22 mm/rev. |
| Flute length $L_c$                       | 41 mm        |
| Shank tolerance                          | h6           |
| Shank Ø $D_s$                            | 8 mm         |
| Standard                                 | DIN 6537 K   |
| Tolerance nominal Ø                      | h7           |

|   |                   |
|---|-------------------|
| Number of cutting edges Z                         | 2                 |
| recommended maximum drilling depth L <sub>2</sub> | 29.3 mm           |
| Series  | Master Steel      |
| Coating   | TiAlN             |
| Tool material                                     | solid carbide     |
| Version   | 4xD               |
| Point angle                                       | 135 degrees       |
| Shank   | DIN 6535 HB 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                                  |                |          |