### Garant

# GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TIAIN, Ø DC h7 (mm or inch): 6,5



#### Order data

| Order number | 122435 6,5    |
|--------------|---------------|
| GTIN         | 4045197786708 |
| Item class   | 11E           |

#### Description

#### Version:

**3-flute drill**, specially developed for **use at very high feed rates**. Extremely suitable for **machines with high power** output and stable machining conditions.

- Special point geometry with stable cutting edges and large clearance at the centre permits very high feed rates.
- The patented point geometry is optimised for chip flow and generates low cutting forces with good chip breakage.
- With 145° point angle for low burr formation when drilling through holes.

The **sector-leading technology of the chisel point** guarantees **optimum self-centring behaviour** and permits spot drilling on irregular surfaces. 3 guide chamfers guarantee a stable exit from the hole and an exact roundness of the hole.

#### Note:

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

HB and HE shanks are available at the same price as HA.<br>For **HB shanks:** use order **No. 122436**.<br>For **HE shanks:** use order **No. 122435** + **129100HE**.

Standard: DIN 6537 K

Tolerance nominal Ø: h7

Number of cutting edges Z: 3

Tolerance nominal Ø: h7

recommended maximum drilling depth L2: 24.3 mm

Overall length L: 79 mm

Shank Ø D<sub>s</sub>: 8 mm

Feed f in steel < 1100 N/mm<sup>2</sup>: 0.37 mm/rev.

#### **Technical description**

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## Data sheet

| Nominal Ø D <sub>c</sub>                 | 6.5 mm            |  |  |
|--|-------------------|--|--|
| Tolerance nominal Ø                      | h7                |  |  |
| Feed f in steel < 1100 N/mm <sup>2</sup> | 0.37 mm/rev.      |  |  |
| Flute length L <sub>c</sub>              | 34 mm             |  |  |
| Shank Ø Ds                               | 8 mm              |  |  |
| Overall length L                         | 79 mm             |  |  |
| Standard                                 | DIN 6537 K        |  |  |
| Number of cutting edges Z                | 3                 |  |  |
| recommended maximum drilling depth $L_2$ | 24.3 mm           |  |  |
| Series                                   | Master Steel      |  |  |
| Coating                                  | TiAIN             |  |  |
| Tool material                            | solid carbide     |  |  |
| Version                                  | 4×D               |  |  |
| Point angle                              | 145 °             |  |  |
| 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    | 160 m/min      | Р        |
| Steel < 750 N/mm <sup>2</sup>  | suitable    | 140 m/min      | Р        |
| Steel < 900 N/mm <sup>2</sup>  | suitable    | 130 m/min      | Р        |
| Steel < 1100 N/mm <sup>2</sup> | suitable    | 110 m/min      | Р        |
| Steel < 1400 N/mm <sup>2</sup> | suitable    | 90 m/min       | Р        |
| Steel < 55 HRC                 | suitable    | 60 m/min       | Н        |

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| INOX < 900 N/mm <sup>2</sup> | suitable                                  | 60 m/min  | М |
|------------------------------|---|-----------|---|
| INOX > 900 N/mm <sup>2</sup> | suitable                                  | 50 m/min  | М |
| Ti > 850 N/mm²               | suitable only under restricted conditions | 40 m/min  | S |
| GG                           | suitable                                  | 130 m/min | К |
| GGG                          | suitable                                  | 80 m/min  | К |
| Uni                          | suitable                                  |           |   |
| wet maximum                  | suitable                                  |           |   |
| wet minimum<br>Services      | suitable                                  |           |   |

Shank grinding Type HE

129100 HE