

# GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TiAIN, Ø DC h7 (mm or inch): 13,5



#### Order data

| Order number | 123035 13,5   |  |  |
|--------------|---------------|--|--|
| GTIN         | 4045197839954 |  |  |
| Item class   | 11E           |  |  |

### **Description**

#### **Version:**

**3-flute drill**, specially developed for **use at very high feed rates**. Outstandingly suitable for **machines with high installed power** and stable operating conditions.

- Special cutter geometry with stable cutting edges and large clearance at the centre enables very high feed rates.
- The patented tip is optimised for chip flow and generates low cutting pressure with good chip breakage.

The sector-leading technology of the drill point guarantees optimum self-centring behaviour. 3 guide chamfers guarantee a stable exit from the hole and an exact roundness of the hole.

#### Note:

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

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

Form HB: order with No. 123036.

Form **HE**: order with **No. 123035 + 129100HE**.

Standard: Manufacturer's standard

Tolerance nominal Ø: h7 Number of cutting edges Z: 3 Tolerance nominal Ø: h7

recommended maximum drilling depth L<sub>2</sub>: 112.8 mm

Overall length L: 178 mm Shank Ø D<sub>6</sub>: 14 mm

Feed f in steel < 1100 N/mm<sup>2</sup>: 0.56 mm/rev.

## **Technical description**



| Standard  | Manufacturer's standard |  |  |
|---|-------------------------|--|--|
| Shank Ø D <sub>s</sub>                            | 14 mm                   |  |  |
| Nominal Ø D <sub>c</sub>                          | 13.5 mm                 |  |  |
| recommended maximum drilling depth L <sub>2</sub> | 112.8 mm                |  |  |
| Flute length L <sub>c</sub>                       | 133 mm                  |  |  |
| Overall length L                                  | 178 mm                  |  |  |
| Tolerance nominal Ø                               | h7                      |  |  |
| Number of cutting edges Z                         | 3                       |  |  |
| Feed f in steel < 1100 N/mm <sup>2</sup>          | 0.56 mm/rev.            |  |  |
| Series  | Master Steel            |  |  |
| Coating   | TiAlN                   |  |  |
| Tool material                                     | Solid carbide           |  |  |
| Version   | 8×D                     |  |  |
| Point angle                                       | 140°                    |  |  |
| Shank   | DIN 6535 HA to h6       |  |  |
| Through-coolant                                   | yes, to 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    | 120 m/min             | Р        |
| Steel < 750 N/mm <sup>2</sup>  | suitable    | 110 m/min             | Р        |
| Steel < 900 N/mm <sup>2</sup>  | suitable    | 100 m/min             | Р        |
| Steel < 1100 N/mm <sup>2</sup> | suitable    | 90 m/min              | Р        |
| Steel < 1400 N/mm <sup>2</sup> | suitable    | 70 m/min              | Р        |
| Steel < 55 HRC                 | suitable    | 60 m/min              | Н        |



| INOX < 900 N/mm <sup>2</sup> | suitable                                  | 55 m/min  | M |
|------------------------------|---|-----------|---|
| INOX > 900 N/mm <sup>2</sup> | suitable                                  | 50 m/min  | M |
| Ti > 850 N/mm <sup>2</sup>   | suitable only under restricted conditions | 40 m/min  | S |
| GG                           | suitable                                  | 120 m/min | K |
| GGG                          | suitable                                  | 80 m/min  | K |
| Uni                          | suitable                                  |           |   |
| wet maximum                  | suitable                                  |           |   |
| wet minimum<br>Services      | <del>suitable</del>                       |           |   |

Shank grinding Type HE 129100 HE