

# GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TiAIN, Ø DC h7 (mm or inch): 13/32



#### Order data

| Order number | 123035 13/32  |
|--------------|---------------|
| GTIN         | 4062406112400 |
| 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.

#### **Recommendation:**

#### **Maximum drilling depth:**

flute length (see table) less  $1.5 \times \text{nominal } \emptyset$ .

#### 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 L₂: 98.4 mm

Overall length L: 162 mm Shank Ø D<sub>s</sub>: 12 mm

Feed f in steel < 1100 N/mm<sup>2</sup>: 0.5 mm/rev.

## **Technical description**

| Feed f in steel < 1100 N/mm <sup>2</sup>          | 0.5 mm/rev.             |  |  |
|---|-------------------------|--|--|
| recommended maximum drilling depth L <sub>2</sub> | 98.4 mm                 |  |  |
| Overall length L                                  | 162 mm                  |  |  |
| Standard  | Manufacturer's standard |  |  |
| Number of cutting edges Z                         | 3                       |  |  |
| Flute length L <sub>c</sub>                       | 114 mm                  |  |  |
| Shank Ø D <sub>s</sub>                            | 12 mm                   |  |  |
| Tolerance nominal Ø                               | h7                      |  |  |
| Inch nominal Ø corresponds to                     | 10,32 mm                |  |  |
| Series  | GARANT Master Steel     |  |  |
| Coating   | TiAlN                   |  |  |
| Tool material                                     | Solid carbide           |  |  |
|   | 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 | $\mathbf{V}_{c}$ | 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                                  |           |   |
| <del>wet minimum</del><br>Services | <del>suitable</del>                       |           |   |

Shank grinding Type HE

129100 HE