### Garant

# GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TIAIN, Ø DC h7 (mm or inch): 11,4

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#### Order data

| Order number | 123035 11,4   |
|--------------|---------------|
| GTIN         | 4045197839831 |
| 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  $\emptyset$ : h7 Number of cutting edges Z: 3 Tolerance nominal  $\emptyset$ : h7 recommended maximum drilling depth  $L_2$ : 96.9 mm Overall length L: 162 mm Shank  $\emptyset$  D<sub>s</sub>: 12 mm Feed f in steel < 1100 N/mm<sup>2</sup>: 0.5 mm/rev.

#### **Technical description**

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| recommended maximum drilling depth L <sub>2</sub> | 96.9 mm                 |  |  |
|---|-------------------------|--|--|
|   |                         |  |  |
| Standard  | Manufacturer's standard |  |  |
| Tolerance nominal Ø                               | h7                      |  |  |
| Feed f in steel < 1100 N/mm <sup>2</sup>          | 0.5 mm/rev.             |  |  |
| Shank Ø D <sub>s</sub>                            | 12 mm                   |  |  |
| Number of cutting edges Z                         | 3                       |  |  |
| Flute length L <sub>c</sub>                       | 114 mm                  |  |  |
| Nominal Ø D <sub>c</sub>                          | 11.4 mm                 |  |  |
| Overall length L                                  | 162 mm                  |  |  |
| Series  | Master Steel            |  |  |
| Coating   | TiAIN                   |  |  |
| 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 | V <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        |

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| INOX < 900 N/mm <sup>2</sup> | suitable                                  | 55 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                                  | 120 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