

## Garant

### GARANT Master Steel solid carbide high-performance reamer HPC through hole, TiAlN, Nominal $\varnothing$ DC: 9,99mm



#### Order data

|              |               |
|--------------|---------------|
| Order number | 164420 9,99   |
| GTIN         | 4067263886549 |
| Item class   | 10P           |

#### Description

##### Version:

The latest generation of **universal** HPC reamers. Extra-short teeth for increased cutting performance values. Optimised cooling strategy with radially arranged coolant outlets aligned directly to the teeth. **For uncompromising applications in steel and stainless steel.** Reliable machining of high-tensile steels **up to 60 HRC.** **Version suitable for NC** with straight shank  $\varnothing$  for standard arbors especially in **hydraulic chucks** or **high precision collet chucks.**

Very high concentricity and process reliability due to unequal spacing.

##### Tolerance specifications:

**Configurable:** Reamers finish ground to match your specification.

**H7:** Version for H7 bore tolerance.

**0/0.005 mm:** Manufacturing or cutting tolerance of nominal  $\varnothing$  D<sub>c</sub>.

##### Application:

Special version for through holes.

#### Technical description

|  |              |
|--|--------------|
| Overall length L                         | 120 mm       |
| Series                                   | Master Steel |
| Overhang L <sub>1</sub>                  | 80 mm        |
| Tolerance                                | 0 / 0.005    |
| Number of cutting edges Z                | 6            |
| Feed f in steel < 1100 N/mm <sup>2</sup> | 1.4 mm/rev.  |
| Nominal $\varnothing$ D <sub>c</sub>     | 9.99 mm      |

|   |                         |
|---|-------------------------|
| Feed f in stainless steel < 900 N/mm <sup>2</sup> | 0.4 mm/rev.             |
| Shank Ø D <sub>s</sub>                            | 10 mm                   |
| Reaming oversize in diameter                      | 0.1 mm                  |
| Flute length L <sub>c</sub>                       | 12 mm                   |
| Coating   | TiAlN                   |
| Tool material                                     | Solid carbide           |
| Standard  | Manufacturer's standard |
| Through-coolant                                   | yes, with 25 bar        |
| Shank   | DIN 6535 HA with h6     |
| Machining strategy                                | HPC                     |
| Application for type of drilling                  | for through holes       |
| Colour ring                                       | green                   |
| Type of product                                   | Phillips bit            |

## User data

|                                | Suitability                               | V <sub>c</sub> | ISO code |
|--------------------------------|---|----------------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable only under restricted conditions | 180 m/min      | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 180 m/min      | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 180 m/min      | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 150 m/min      | P        |
| Steel < 1400 N/mm <sup>2</sup> | Suitable                                  | 100 m/min      | P        |
| Steel < 55 HRC                 | Suitable                                  | 12 m/min       | H        |
| Steel < 60 HRC                 | Suitable only under restricted conditions | 8 m/min        | H        |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 50 m/min       | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable                                  | 30 m/min       | M        |
| GG                             | suitable                                  | 110 m/min      | K        |
| GGG                            | suitable                                  | 90 m/min       | K        |

|             |          |
|-------------|----------|
| Uni         | suitable |
| wet maximum | suitable |
| wet minimum | suitable |