

Garant

GARANT Master Steel solid carbide high-performance reamer HPC blind hole, TiAlN, Nominal Ø DC: 4,5mm



Order data

| | |
|--------------|---------------|
| Order number | 164425 4,5 |
| GTIN | 4062406284381 |
| 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 Ø 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 Ø D_c.

Application:

Special version for blind holes.

Technical description

| | |
|---|--------------|
| Tolerance | Configurable |
| Feed f in stainless steel < 900 N/mm ² | 0.2 mm/rev. |
| Shank Ø D _s | 6 mm |
| Feed f in steel < 1100 N/mm ² | 0.6 mm/rev. |
| Overall length L | 75 mm |
| Series | Master Steel |

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|----------------------------------|-------------------------|
| Nominal $\varnothing D_c$ | 4.5 mm |
| Flute length L_c | 8 mm |
| Overhang L_1 | 39 mm |
| Number of cutting edges Z | 4 |
| \varnothing range | 4.201 - 4.7 mm |
| Reaming oversize in diameter | 0.1 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 blind holes |
| Colour ring | green |
| Type of product | Phillips bit |

User data

| | Suitability | V_c | ISO code |
|--------------------------------|---|-----------|----------|
| Steel < 500 N/mm ² | suitable only under restricted conditions | 180 m/min | P |
| Steel < 750 N/mm ² | suitable | 180 m/min | P |
| Steel < 900 N/mm ² | suitable | 180 m/min | P |
| Steel < 1100 N/mm ² | suitable | 150 m/min | P |
| Steel < 1400 N/mm ² | 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 ² | suitable | 50 m/min | M |
| INOX > 900 N/mm ² | 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 | | |