

GARANT Master Steel solid carbide high-performance reamer HPC through hole, TiAlN, Nominal Ø DC: 4,99mm



Order data

| Order number | 164420 4,99 |
|--------------|---------------|
| GTIN | 4067263886419 |
| 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 Ø D_C.

Application:

Special version for through holes.

Technical description

| Shank Ø D _s | 6 mm |
|---|-------------|
| Nominal Ø D _C | 4.99 mm |
| Overall length L | 75 mm |
| Feed f in stainless steel < 900 N/mm ² | 0.2 mm/rev. |
| Number of cutting edges Z | 4 |
| Reaming oversize in diameter | 0.1 mm |
| Feed f in steel < 1100 N/mm ² | 0.6 mm/rev. |



| Flute length L_c | 8 mm | |
|----------------------------------|-------------------------|--|
| Overhang L ₁ | 39 mm | |
| Series | Master Steel | |
| Tolerance | 0 / 0.005 | |
| Coating | TiAIN | |
| 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 | \mathbf{V}_{c} | ISO code |
|--------------------------------|---|------------------|----------|
| Steel < 500 N/mm ² | suitable only under restricted conditions | 180 m/min | Р |
| Steel < 750 N/mm ² | suitable | 180 m/min | Р |
| Steel < 900 N/mm ² | suitable | 180 m/min | Р |
| Steel < 1100 N/mm ² | suitable | 150 m/min | Р |
| Steel < 1400 N/mm ² | Suitable | 100 m/min | Р |
| Steel < 55 HRC | Suitable | 12 m/min | Н |
| Steel < 60 HRC | Suitable only under restricted conditions | 8 m/min | Н |
| 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 | К |
| GGG | suitable | 90 m/min | K |

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