## Garant

Solid carbide NC machine reamer, TiAlN, Nominal Ø DC: 13mm



### Order data

| Order number | 164341 13     |  |  |
|--------------|---------------|--|--|
| GTIN         | 4062406136796 |  |  |
| Item class   | 11P           |  |  |

## Description

#### Version:

**Version suitable for NC** similar to DIN 8093 with straight shank Ø for standard chucking especially in hydraulic chucks or high precision collet chucks. This ensures the highest concentricity.

#### **Tolerance specifications:**

Size 0.6 – 0.9: Manufacturing or cutting edge tolerance **0/+0.004 mm.** 

Size 0.98 – 20: Reamer manufacturing or cutting edge tolerance to DIN1420 for **H7 bore tolerance.** 

**No need to procure special collets when using GARANT-NC reamers.** With long flutes and left-hand helix.

#### **Application:**

For reaming through holes, as the chips are evacuated in the cutting direction. Lead taper is suitable also for blind holes.

#### Note:

For reamers like No. 164340 and 164341 but with other diameters and fits see No. 164344 and 164345.

### **Technical description**

| Feed f in steel < 1100 N/mm <sup>2</sup> | 0.18 mm/rev. |  |  |
|--|--------------|--|--|
| Shank Ø D <sub>s</sub>                   | 14 mm        |  |  |
| Number of cutting edges Z                | 8            |  |  |
| Flute length $L_c$                       | 44 mm        |  |  |
| Tolerance                                | H7           |  |  |
| Overall length L                         | 150 mm       |  |  |

| Nominal Ø D <sub>c</sub>         | 13 mm                   |  |  |
|----------------------------------|-------------------------|--|--|
| Overhang L <sub>1</sub>          | 99 mm                   |  |  |
| Reaming oversize in diameter     | 0.2 - 0.3 mm            |  |  |
| Coating                          | TiAIN                   |  |  |
| Tool material                    | Solid carbide           |  |  |
| Standard                         | Manufacturer's standard |  |  |
| Through-coolant                  | no                      |  |  |
| Shank                            | DIN 6535 HA with h6     |  |  |
| Application for type of drilling | for through holes       |  |  |
| Colour ring                      | green                   |  |  |
| Type of product                  | Phillips bit            |  |  |

## User data

|                                | Suitability                               | Vc       | ISO code |
|--------------------------------|---|----------|----------|
| Aluminium                      | suitable                                  | 35 m/min | Ν        |
| Aluminium (short<br>chipping)  | suitable                                  | 30 m/min | Ν        |
| Alu > 10% Si                   | suitable only under restricted conditions | 25 m/min | Ν        |
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 30 m/min | Р        |
| Steel < 750 N/mm²              | suitable                                  | 25 m/min | Р        |
| Steel < 900 N/mm²              | suitable                                  | 20 m/min | Р        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 15 m/min | Р        |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 10 m/min | Р        |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 15 m/min | М        |
| INOX > 900 N/mm <sup>2</sup>   | suitable                                  | 12 m/min | Μ        |
| Ti > 850 N/mm²                 | suitable only under restricted conditions | 10 m/min | S        |
| GG(G)                          | suitable                                  | 10 m/min | К        |
| CuZn                           | suitable                                  | 25 m/min | Ν        |

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# Data sheet

Uni

suitable

wet maximum

suitable