

**Garant**
**GARANT Master Steel DEEP solid carbide deep-hole drill, plain shank DIN 6535 HA 16×D, TiAlN, Ø DC: 11 mm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 123888 11     |
| GTIN         | 4062406267926 |
| Item class   | 10E           |

**Description**
**Version:**

**Excellent chip evacuation** due to the unequal helical pitch of the flutes, guide rings and additional guide chamfers for very high precision when drilling. **Maximum process reliability** due to exactly matching tools within the overall system. Drilling up to the maximum depth without a pilot drill. **Significantly increased tool stability** due to the substantially strengthened core. **Increased metal removal rates** and **outstanding tool lives** lead to an economical high-end drilling process.

**Recommendation:**
**Maximum drilling depth:**

flute length (see table) less 1.5×nominal Ø.

**Note:**

Flute length  $L_c = L_2 + 1.5 \times D_c$ .

For process reliability when using the 16×D deep-hole drill, an initial centre drilling with No. 121068 – 121130 or at least 4×D pilot drilling operation with pilot drill No. 123885 is necessary. For deep holes greater than 20×D, a pilot hole to the maximum drilling depth with pilot drill No. 123885 is absolutely essential. The generation of a pilot hole improves process reliability. **The specified L/D ratio gives the minimum achievable depth of hole with the respective deep-hole drill.**

Standard: Manufacturer's standard

Tolerance nominal Ø: j6

Number of cutting edges Z: 2

Tolerance nominal Ø: j6

Overall length L: 254 mm

Shank Ø D<sub>s</sub>: 12 mm

Feed f in steel < 900 N/mm<sup>2</sup>: 0.21 mm/rev.

**Technical description**

|                                         |                         |
|-----------------------------------------|-------------------------|
| Overall length L                        | 254 mm                  |
| Feed f in steel < 900 N/mm <sup>2</sup> | 0.21 mm/rev.            |
| Nominal Ø D <sub>c</sub>                | 11 mm                   |
| Number of cutting edges Z               | 2                       |
| Flute length L <sub>c</sub>             | 203 mm                  |
| Standard                                | Manufacturer's standard |
| Shank Ø D <sub>s</sub>                  | 12 mm                   |
| Tolerance nominal Ø                     | j6                      |
| Series                                  | GARANT Master Steel     |
| Coating                                 | TiAlN                   |
| Tool material                           | Solid carbide           |
| Drill depth up to                       | 6×D                     |
| Point angle                             | 140 degrees             |
| Shank                                   | DIN 6535 HA to h5       |
| Through-coolant                         | yes, with 40 bar        |
| Machining strategy                      | HPC                     |
| Pilot drill required                    | yes, pilot drill        |
| Type of product                         | Jobber drill            |