### Garant

# GARANT Master Steel DEEP solid carbide deep-hole drill, plain shank DIN 6535 HA 16×D, TiAIN, Ø DC: 4 mm

#### Order data

Order number	123888 4
GTIN	4062406267650
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 highend 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 withpilot 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  $\emptyset$ : j6 Number of cutting edges Z: 2 Tolerance nominal  $\emptyset$ : j6 recommended maximum drilling depth L<sub>2</sub>: 70 mm Overall length L: 118 mm Shank  $\emptyset$  D<sub>s</sub>: 6 mm Feed f in steel < 900 N/mm<sup>2</sup>: 0.09 mm/rev.

## **Technical description**

Nominal Ø D <sub>c</sub>	4 mm
recommended maximum drilling depth $L_2$	70 mm
Number of cutting edges Z	2
Tolerance nominal Ø	јб
Overall length L	118 mm
Shank Ø D <sub>s</sub>	6 mm
Standard	Manufacturer's standard
Flute length L <sub>c</sub>	76 mm
Feed f in steel < 900 N/mm <sup>2</sup>	0.09 mm/rev.
Series	GARANT Master Steel
Coating	TiAIN
Tool material	Solid carbide
Drill depth up to	16×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