

## Garant

### GARANT Master Steel DEEP solid carbide deep-hole drill, plain shank DIN 6535 HA 20×D, TiAlN, Ø DC: 3,3 mm



#### Order data

Order number	123890 3,3
GTIN	4062406267995
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:

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 hole 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.**

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

Standard: Manufacturer's standard

Tolerance nominal Ø: j6

Number of cutting edges Z: 2

Tolerance nominal Ø: j6

recommended maximum drilling depth  $L_2$ : 74.1 mm

Overall length L: 122 mm

Shank Ø  $D_s$ : 6 mm

Feed f in steel < 900 N/mm<sup>2</sup>: 0.09 mm/rev.

## Technical description

Flute length $L_c$	79 mm
Overall length $L$	122 mm
Standard	Manufacturer's standard
Shank $\varnothing D_s$	6 mm
Nominal $\varnothing D_c$	3.3 mm
Number of cutting edges $Z$	2
recommended maximum drilling depth $L_2$	74.1 mm
Tolerance nominal $\varnothing$	j6
Feed $f$ in steel $< 900 \text{ N/mm}^2$	0.09 mm/rev.
Series	GARANT Master Steel
Coating	TiAlN
Tool material	Solid carbide
Drill depth up to	20xD
Point angle	140 degrees
Shank	DIN 6535 HA to h6
Through-coolant	yes, with 40 bar
Machining strategy	HPC
Pilot drill required	yes, pilot drill
Colour ring	green
Type of product	Jobber drill