

## Garant

### Solid carbide drill plain shank DIN 6535 HA 180°, TiAlN, Ø DC m7: 16 mm



#### Order data

Order number	122506 16
GTIN	4045197744531
Item class	11E

#### Description

##### Version:

Special point geometry for generating **180° flat-bottomed holes**. Low radial forces even when spot drilling on faces with up to 45° slope. Flute geometry for optimum chip evacuation. With 4 guide chamfers to stabilise the drill in the hole.

##### Advantage:

**The 180° point angle** permits drilling and counterboring in a single operation.

##### Recommendation:

When using the solid carbide 180° drill it is absolutely essential for process reliability:

- **when spot drilling on flat surfaces to drill a pilot hole 1xD using pilot drill No. 122736.**
- **when spot drilling on sloping surfaces up to 15° : reduce the feed rate f to 50 %, up to 30°: reduce the feed rate f to 40 % and up to 45°: reduce the feed rate f to 25 % of the stated value. After spot drilling, the normal feed rate value can be used.**

##### Note:

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

Form HB and HE supplied at the same price as HA.

Form **HB**: order with **No. 122506 + 129100HB** .

Form **HE**: order with **No. 122506 + 129100HE**.

180° solid carbide drills for machining aluminium available on request.

**Not** suitable for generating counterbores for socket-head screws to DIN974-1.

Standard: Manufacturer's standard

Tolerance nominal Ø: m7

Number of cutting edges Z: 2

Semi-Standard: yes

Tolerance nominal Ø: m7

recommended maximum drilling depth  $L_2$ : 39 mm

Overall length L: 113 mm

Shank Ø  $D_s$ : 16 mm

Feed f in steel < 900 N/mm<sup>2</sup>: 0.16 mm/rev.

## Technical description

Number of cutting edges Z	2
Shank tolerance	h6
Standard	Manufacturer's standard
Tolerance nominal $\varnothing$	m7
Shank $\varnothing D_s$	16 mm
Overall length L	113 mm
Nominal $\varnothing D_c$	16 mm
Feed f in steel < 900 N/mm <sup>2</sup>	0.16 mm/rev.
Flute length L <sub>c</sub>	63 mm
recommended maximum drilling depth L <sub>2</sub>	39 mm
Semi-Standard	yes
Coating	TiAlN
Tool material	Solid carbide
Drill depth up to	3×D
Point angle	180 degrees
Shank	DIN 6535 HA to h6
Use for drilling	limited convexity
Use for drilling	limited cross-drilling
Use for drilling	limited oblique spot drilling
Through-coolant	yes, with 25 bar
Pilot drill required	yes, pilot drill
Colour ring	green
Type of product	Jobber drill

## Services

Shank grinding Type HB	129100 HB
Shank grinding Type HE	129100 HE

