

**Garant**
**Solid carbide drill plain shank DIN 6535 HA 180°, TiAlN, Ø DC m7: 20 mm**

**Order data**

Order number	122793 20
GTIN	4045197540805
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 15° 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 1×D using pilot drill No. 122736.**
- **when spot drilling on sloping surfaces up to max. 15° : 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. 122793 + 129100HB** .

Form **HE**: order with **No. 122793 + 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

Tolerance nominal Ø: m7

recommended maximum drilling depth  $L_2$ : 69 mm

Overall length L: 151 mm

Shank Ø  $D_s$ : 20 mm

Feed  $f$  in steel < 900 N/mm<sup>2</sup>: 0.23 mm/rev.

**Technical description**

Nominal $\varnothing D_c$	20 mm
Shank tolerance	h6
Flute length $L_c$	99 mm
Feed $f$ in steel $< 900 \text{ N/mm}^2$	0.23 mm/rev.
Number of cutting edges $Z$	2
Tolerance nominal $\varnothing$	m7
Shank $\varnothing D_s$	20 mm
Overall length $L$	151 mm
Standard	Manufacturer's standard
recommended maximum drilling depth $L_2$	69 mm
Coating	TiAlN
Tool material	Solid carbide
Drill depth up to	5×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
Semi-Standard	yes
Colour ring	green
Type of product	Jobber drill

## Services

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

