

## Solid carbide drill plain shank DIN 6535 HA 180°, TiAIN, Ø DC m7: 13,5mm



## **Order data**

Order number	122793 13,5
GTIN	4045197745323
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.

# **Technical description**

Overall length L	122 mm	
Shank tolerance	h6	
Shank Ø D <sub>s</sub>	14 mm	
Standard	Manufacturer's standard	

Nominal Ø D <sub>c</sub>	13.5 mm		
Number of cutting edges Z	2		
Tolerance nominal Ø	m7		
Feed f in steel < 900 N/mm <sup>2</sup>	0.16 mm/rev.		
Flute length L <sub>c</sub>	75 mm		
recommended maximum drilling depth $L_2$	54.8 mm		
Coating	TiAIN		
Tool material	Solid carbide		
Version	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		

# **User data**

	Suitability	<b>V</b> <sub>c</sub>	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	85 m/min	Р
Steel < 750 N/mm <sup>2</sup>	suitable	75 m/min	Р
Steel < 900 N/mm <sup>2</sup>	suitable	60 m/min	Р
Steel < 1100 N/mm <sup>2</sup>	suitable	50 m/min	Р
INOX < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	45 m/min	М
GG(G)	suitable	90 m/min	K

Uni	suitable	
wet maximum	suitable	
wet minimum	suitable	
Air Services	suitable	

#### Services

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