

# Solid carbide drill plain shank DIN 6535 HA 180°, TiAIN, Ø DC m7: 4,9mm



## **Order data**

Order number	122506 4,9
GTIN	4045197743954
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 1×D 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.

# **Technical description**

Shank Ø D <sub>s</sub>	6 mm	
Standard	Manufacturer's standard	
Number of cutting edges Z	2	
Nominal Ø D <sub>c</sub>	4.9 mm	

Overall length L	66 mm	
Shank tolerance	h6	
Flute length L <sub>c</sub>	28 mm	
Feed f in steel < 900 N/mm <sup>2</sup>	0.08 mm/rev.	
Tolerance nominal Ø	m7	
recommended maximum drilling depth L <sub>2</sub>	20.7 mm	
Coating	TiAIN	
Tool material	Solid carbide	
Version	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	
Semi-Standard	yes	
Colour ring	green	
Type of product	Jobber drill	

# **User data**

	Suitability	$\mathbf{V}_{c}$	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 HE	129100 HE
Shank grinding Type HB	129100 HB