

Garant
Solid carbide drill plain shank DIN 6535 HA 180°, TiAlN, Ø DC m7: 12mm

Order data

Order number	122506 12
GTIN	4045197744463
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.

Technical description

Number of cutting edges Z	2
Shank Ø D _s	12 mm
Standard	Manufacturer's standard
Tolerance nominal Ø	m7

Nominal $\varnothing D_c$	12 mm
Feed f in steel < 900 N/mm ²	0.15 mm/rev.
Overall length L	100 mm
Shank tolerance	h6
Flute length L _c	53 mm
recommended maximum drilling depth L ₂	35 mm
Coating	TiAlN
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	V _c	ISO code
Steel < 500 N/mm ²	suitable	85 m/min	P
Steel < 750 N/mm ²	suitable	75 m/min	P
Steel < 900 N/mm ²	suitable	60 m/min	P
Steel < 1100 N/mm ²	suitable	50 m/min	P
INOX < 900 N/mm ²	suitable only under restricted conditions	45 m/min	M
GG(G)	suitable	90 m/min	K

Uni	suitable
wet maximum	suitable
wet minimum	suitable
Air	suitable
Services	

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