

Garant
Solid carbide drill plain shank DIN 6535 HA 180°, TiAlN, Ø DC m7: 13,8 mm

Order data

| | |
|--------------|---------------|
| Order number | 122506 13,8 |
| GTIN | 4062406090173 |
| 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 : 37.3 mm

Overall length L: 105 mm

Shank Ø D_s : 14 mm

Feed f in steel < 900 N/mm²: 0.16 mm/rev.

Technical description

| Standard | Manufacturer's standard |
|--|-------------------------------|
| Flute length L_c | 58 mm |
| recommended maximum drilling depth L_2 | 37.3 mm |
| Overall length L | 105 mm |
| Tolerance nominal \varnothing | m7 |
| Shank tolerance | h6 |
| Feed f in steel $< 900 \text{ N/mm}^2$ | 0.16 mm/rev. |
| Nominal $\varnothing D_c$ | 13.8 mm |
| Shank $\varnothing D_s$ | 14 mm |
| Number of cutting edges Z | 2 |
| Semi-Standard | yes |
| Coating | TiAlN |
| Tool material | Solid carbide |
| Drill depth up to | 3xD |
| 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 |

