

Garant

Solid carbide drill plain shank DIN 6535 HA 180°, TiAlN, Ø DC m7: 17,5mm



Order data

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|--------------|---------------|
| Order number | 122506 17,5 |
| GTIN | 4045197744562 |
| 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

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| Nominal Ø D_c | 17.5 mm |
| Shank Ø D_s | 18 mm |
| Number of cutting edges Z | 2 |
| Flute length L_c | 71 mm |

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| Feed f in steel < 900 N/mm ² | 0.2 mm/rev. |
| Shank tolerance | h6 |
| Overall length L | 121 mm |
| Standard | Manufacturer's standard |
| Tolerance nominal Ø | m7 |
| recommended maximum drilling depth L ₂ | 44.8 mm |
| Coating | TiAlN |
| Tool material | Solid carbide |
| Version | 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 |
| 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 |

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|-----------------|----------|
| Uni | suitable |
| wet maximum | suitable |
| wet minimum | suitable |
| Air | suitable |
| Services | |

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|------------------------|-----------|
| Shank grinding Type HE | 129100 HE |
| Shank grinding Type HB | 129100 HB |