

Garant
Solid carbide HPC drill plain shank DIN 6535 HA, TiAlN, Ø DC h7: 4,5mm

Order data

| | |
|--------------|---------------|
| Order number | 123301 4,5 |
| GTIN | 4045197452337 |
| Item class | 11E |

Description
Version:

Cutting chisel edge with **high centring accuracy** due to **strong core and special point geometry**.

Particularly high alignment accuracy due to **4 guide chamfers** which stabilise the drill even at extreme depths!

Convex cutting edges with honed edges and special flute profile for **short chips**, even on long chipping materials.

Advantage:

High process reliability and surface quality of the hole.

Note:

Flute length $L_c = L_2 + 1.5 \times D_c$.

For process reliability when using the 12xD drill, an initial centre drilling with NC spotting drills No. 121068 – 121130 is necessary.

Form HB and HE are supplied at the same price as HA.

Form **HB**: order with **No. 123302**.

Form **HE**: order with **No. 123301 + 129100HE**.

NEW GENERATION AVAILABLE!

Recommended successor products are No. 123225 and 123235.

Technical description

| | |
|--|-------------|
| Feed f in steel < 1100 N/mm ² | 0.1 mm/rev. |
| Flute length L_c | 64 mm |
| Nominal Ø D_c | 4.5 mm |
| Shank tolerance | h6 |
| Number of cutting edges Z | 2 |

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|--|-------------------------|
| Tolerance nominal \varnothing | h7 |
| Shank $\varnothing D_s$ | 6 mm |
| Overall length L | 102 mm |
| Standard | Manufacturer's standard |
| recommended maximum drilling depth L_2 | 57.3 mm |
| Coating | TiAlN |
| Tool material | Solid carbide |
| Version | 12xD |
| Point angle | 135 degrees |
| Shank | DIN 6535 HA to h6 |
| Through-coolant | yes, with 25 bar |
| Machining strategy | HPC |
| Semi-Standard | yes |
| Colour ring | green |
| Type of product | Jobber drill |

User data

| | Suitability | V_c | ISO code |
|--------------------------------|---|-----------|----------|
| Aluminium (short chipping) | suitable only under restricted conditions | 180 m/min | N |
| Alu > 10% Si | suitable only under restricted conditions | 140 m/min | N |
| Steel < 500 N/mm ² | suitable only under restricted conditions | 110 m/min | P |
| Steel < 750 N/mm ² | suitable | 90 m/min | P |
| Steel < 900 N/mm ² | suitable | 80 m/min | P |
| Steel < 1100 N/mm ² | suitable | 50 m/min | P |
| Steel < 1400 N/mm ² | suitable | 35 m/min | P |
| INOX < 900 N/mm ² | suitable only under restricted conditions | 40 m/min | M |

| | | | |
|------------------------------|---|----------|-----------|
| INOX > 900 N/mm ² | suitable only under restricted conditions | 35 m/min | M |
| GG(G) | suitable | 70 m/min | K |
| Uni | suitable | | |
| wet maximum | suitable | | |
| Services | | | |
| Shank grinding Type HE | | | 129100 HE |