

**Garant**
**Solid carbide HPC drill plain shank DIN 6535 HA, TiAlN, Ø DC h7: 13mm**

**Order data**

Order number	123301 13
GTIN	4045197452580
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**

Shank tolerance	h6
Feed f in steel < 1100 N/mm <sup>2</sup>	0.26 mm/rev.
Flute length $L_c$	182 mm
Nominal Ø $D_c$	13 mm
Number of cutting edges Z	2

Tolerance nominal $\varnothing$	h7
Shank $\varnothing D_s$	14 mm
Overall length L	230 mm
Standard	Manufacturer's standard
recommended maximum drilling depth $L_2$	162.5 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 <sup>2</sup>	suitable only under restricted conditions	110 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	90 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	80 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	50 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	35 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	40 m/min	M

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