

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

**Order data**

Order number	123110 13
GTIN	4045197357847
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!

**Straight major 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  $L_c = L_2 + 1.5 \times D_c$ .

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

Form **HB**: order with **No. 123115**.

Form **HE**: order with **No. 123110 + 129100 HE**.

**Technical description**

Feed $f$ in stainless steel $< 900 \text{ N/mm}^2$	0.2 mm/rev.
Flute length $L_c$	160 mm
Number of cutting edges $Z$	2
Nominal $\varnothing D_c$	13 mm
Shank tolerance	h6
Tolerance nominal $\varnothing$	h7
Shank $\varnothing D_s$	14 mm

Overall length L	208 mm
Standard	Manufacturer's standard
recommended maximum drilling depth L <sub>2</sub>	140.5 mm
Coating	TiAlN
Tool material	Solid carbide
Version	10xD
Point angle	135 degrees
Shank	DIN 6535 HA to h6
Through-coolant	yes, with 25 bar
Machining strategy	HPC
Semi-Standard	yes
Colour ring	blue
Type of product	Jobber drill

## User data

	Suitability	V <sub>c</sub>	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	200 m/min	N
Alu > 10% Si	suitable only under restricted conditions	180 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	110 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	80 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	70 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	65 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	55 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable	25 m/min	S
wet maximum	suitable		
wet minimum	suitable		

## Services

Shank grinding Type HE

129100 HE