

**Garant**
**GARANT Master Steel SPEED solid carbide drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7: 13mm**

**Order data**

Order number	122425 13
GTIN	4045197786074
Item class	11E

**Description**
**Version:**

Developed for use with **very high cutting speeds**. Outstandingly suitable for machines with **low power output** and high speeds.

- **Clear reduction in cutting forces due to special cutter geometry.**
- **Coating for best wear resistance even at high process temperatures.**
- **Polished flutes for good chip clearance.**

A **slim chisel edge** and the **special arrangement of the 4 guide chamfers** ensure **high positioning and alignment accuracy**. Optimised micro-geometry for increased working life and performance capability.

**Note:**

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

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

Form **HB**: state **No.122426** on the order.

Form **HE**: order with **No.122425 + 129100HE**.

**Technical description**

Nominal Ø D <sub>c</sub>	13 mm
Standard	DIN 6537 K
Shank Ø D <sub>s</sub>	14 mm
Tolerance nominal Ø	h7
Flute length L <sub>c</sub>	60 mm
Shank tolerance	h6

Number of cutting edges Z	2
Overall length L	107 mm
Feed f in steel < 1100 N/mm <sup>2</sup>	0.31 mm/rev.
recommended maximum drilling depth L <sub>2</sub>	40.5 mm
Series	Master Steel
Coating	TiAlN
Tool material	solid carbide
Version	4×D
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 <sub>c</sub>	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	220 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	200 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	180 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	170 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	90 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	75 m/min	M
GG	suitable	160 m/min	K
GGG	suitable	130 m/min	K
Uni	suitable		
wet maximum	suitable		

wet minimum  
**Services**

suitable

Shank grinding Type HE

129100 HE