

## Garant

### GARANT Master Steel SPEED solid carbide drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7: 4,5mm



#### Order data

Order number	122415 4,5
GTIN	4045197783967
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  $L_c = L_2 + 1.5 \times D_c$ .

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

Form **HB**: order with **No. 122416**.

Form **HE**: order with **No. 122415 + 129100HE**.

#### Technical description

Feed f in steel < 1100 N/mm <sup>2</sup>	0.16 mm/rev.
Overall length L	66 mm
Tolerance nominal Ø	h7
Flute length L <sub>c</sub>	24 mm
Number of cutting edges Z	2
Standard	DIN 6537 K

Nominal $\varnothing D_c$	4.5 mm
Shank $\varnothing D_s$	6 mm
Shank tolerance	h6
recommended maximum drilling depth $L_2$	17.3 mm
Series	Master Steel
Coating	TiAlN
Tool material	solid carbide
Version	4xD
Point angle	135 degrees
Shank	DIN 6535 HA to h6
Through-coolant	no
Machining strategy	HPC
Semi-Standard	yes
Colour ring	green
Type of product	Jobber drill

## User data

	Suitability	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	170 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	150 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	120 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	110 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	60 m/min	P
GG	suitable	110 m/min	K
GGG	suitable	100 m/min	K
Uni	suitable		
wet maximum	suitable		

## Services

Shank grinding Type HE

129100 HE