

Garant
GARANT Master Steel SPEED solid carbide drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7: 13,5mm

Order data

Order number	122415 13,5
GTIN	4045197784773
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

Standard	DIN 6537 K
Nominal $\varnothing D_c$	13.5 mm
Shank tolerance	h6
Number of cutting edges Z	2
Feed f in steel < 1100 N/mm ²	0.31 mm/rev.
Flute length L_c	60 mm

Shank $\varnothing D_s$	14 mm
Tolerance nominal \varnothing	h7
Overall length L	107 mm
recommended maximum drilling depth L_2	39.8 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 ²	suitable	170 m/min	P
Steel < 750 N/mm ²	suitable	150 m/min	P
Steel < 900 N/mm ²	suitable	120 m/min	P
Steel < 1100 N/mm ²	suitable	110 m/min	P
Steel < 1400 N/mm ²	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