

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

Order data

Order number	123225 13,5
GTIN	4045197845757
Item class	11E

Description
Version:

Developed for use with **very high cutting speeds**. Outstandingly suitable for machines with **low installed power** 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 point** 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 $L_c = L_2 + 1.5 \times D_c$.

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.

Order form **HB**: with **No. 123226**.

Order form **HE**: with **No. 123225 + 129100HE**.

Technical description

Overall length L	230 mm
Shank Ø D _s	14 mm
Feed f in steel < 1100 N/mm ²	0.23 mm/rev.
Flute length L _c	182 mm
Number of cutting edges Z	2

Nominal $\varnothing D_c$	13.5 mm
recommended maximum drilling depth L_2	161.8 mm
Standard	Manufacturer's standard
Tolerance nominal \varnothing	h7
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Version	12xD
Point angle	135 degrees
Shank	DIN 6535 HA to h6
Through-coolant	yes, to 25 bar
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	160 m/min	P
Steel < 750 N/mm ²	suitable	125 m/min	P
Steel < 900 N/mm ²	suitable	115 m/min	P
Steel < 1100 N/mm ²	suitable	105 m/min	P
Steel < 1400 N/mm ²	suitable	65 m/min	P
INOX < 900 N/mm ²	suitable only under restricted conditions	55 m/min	M
GG	suitable	100 m/min	K
GGG	suitable	95 m/min	K
Uni	suitable		
wet maximum	suitable		

wet minimum
Services

suitable

Shank grinding Type HE

129100 HE