

Garant

GARANT Master Steel SPEED solid carbide drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7: 16,5 mm


Order data

Order number	123225 16,5
GTIN	4045197845870
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.

Recommendation:
Maximum drilling depth:

flute length (see table) less 1.5×nominal Ø.

Note:

For process reliability when using the 12×D 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**.

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

Standard: Manufacturer's standard

Tolerance nominal Ø: h7

Number of cutting edges Z: 2

Tolerance nominal Ø: h7

recommended maximum drilling depth L_2 : 209.3 mm

Overall length L: 285 mm

Shank Ø D_s : 18 mm

Feed f in steel < 1100 N/mm²: 0.29 mm/rev.

Technical description

Number of cutting edges Z	2
Flute length L_c	234 mm
Standard	Manufacturer's standard
Feed f in steel < 1100 N/mm ²	0.29 mm/rev.
Shank $\varnothing D_s$	18 mm
Overall length L	285 mm
Tolerance nominal $\varnothing$	h7
recommended maximum drilling depth L_2	209.3 mm
Nominal $\varnothing D_c$	16.5 mm
Series	GARANT Master Steel
Coating	TiAlN
Tool material	Solid carbide
	12xD
Point angle	135 °
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	suitable		

Services

Shank grinding Type HE

129100 HE