

# GARANT Master Steel SPEED solid carbide drill, plain shank DIN 6535 HA, TiAIN, Ø DC h7: 15,5 mm



## **Order data**

Order number	123225 15,5
GTIN	4045197845832
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  $1.5 \times \text{nominal } \emptyset$ .

#### Note:

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

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**.

Standard: Manufacturer's standard

Tolerance nominal Ø: h7 Number of cutting edges Z: 2

Semi-Standard: yes Tolerance nominal Ø: h7

recommended maximum drilling depth L<sub>2</sub>: 184.8 mm

Overall length L: 260 mm Shank Ø D<sub>s</sub>: 16 mm

Feed f in steel < 1100 N/mm<sup>2</sup>: 0.26 mm/rev.

# **Technical description**

Flute length $L_c$ 208 mm  Nominal $\oslash$ $D_c$ 15.5 mm  recommended maximum drilling depth $L_2$ 184.8 mm  Standard Manufacturer's standard  Feed f in steel < 1100 N/mm² 0.26 mm/rev.  Overall length L 260 mm  Shank $\oslash$ $D_s$ 16 mm  Number of cutting edges $Z$ 2  Tolerance nominal $\oslash$ h7  Semi-Standard yes  Series GARANT Master Steel  Coating TiAlN  Tool material Solid carbide  Drill depth up to 12×D  Point angle 135 degrees  Shank DIN 6535 HA to h6  Through-coolant yes, to 25 bar  Machining strategy HPC  Colour ring green		
recommended maximum drilling depth L2  Standard  Manufacturer's standard  Feed f in steel < 1100 N/mm²  Overall length L  Shank Ø D3  I6 mm  Number of cutting edges Z  Tolerance nominal Ø  Semi-Standard  Seeries  GARANT Master Steel  Coating  TiAIN  Tool material  Solid carbide  Drill depth up to  Point angle  Shank  DIN 6535 HA to h6  Through-coolant  Machining strategy  HPC	Flute length L <sub>c</sub>	208 mm
StandardManufacturer's standardFeed f in steel < 1100 N/mm²	Nominal Ø D <sub>c</sub>	15.5 mm
Feed f in steel < 1100 N/mm²0.26 mm/rev.Overall length L260 mmShank Ø D₃16 mmNumber of cutting edges Z2Tolerance nominal Øh7Semi-StandardyesSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle135 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPC	recommended maximum drilling depth L <sub>2</sub>	184.8 mm
Overall length L260 mmShank Ø D₅16 mmNumber of cutting edges Z2Tolerance nominal Øh7Semi-StandardyesSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle135 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPC	Standard	Manufacturer's standard
Shank Ø D₃16 mmNumber of cutting edges Z2Tolerance nominal Øh7Semi-StandardyesSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle135 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPC	Feed f in steel < 1100 N/mm <sup>2</sup>	0.26 mm/rev.
Number of cutting edges Z2Tolerance nominal Øh7Semi-StandardyesSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle135 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPC	Overall length L	260 mm
Tolerance nominal Ø h7  Semi-Standard yes  Series GARANT Master Steel  Coating TiAIN  Tool material Solid carbide  Drill depth up to 12×D  Point angle 135 degrees  Shank DIN 6535 HA to h6  Through-coolant yes, to 25 bar  Machining strategy HPC	Shank Ø D <sub>s</sub>	16 mm
Semi-StandardyesSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle135 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPC	Number of cutting edges Z	2
Series GARANT Master Steel  Coating TiAIN  Tool material Solid carbide  Drill depth up to 12×D  Point angle 135 degrees  Shank DIN 6535 HA to h6  Through-coolant yes, to 25 bar  Machining strategy HPC	Tolerance nominal Ø	h7
CoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle135 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPC	Semi-Standard	yes
Tool material  Drill depth up to  12×D  Point angle  Shank  DIN 6535 HA to h6  Through-coolant  Machining strategy  Solid carbide  12×D  135 degrees  DIN 6535 HA to h6  HPC	Series	GARANT Master Steel
Drill depth up to  Point angle  Shank  DIN 6535 HA to h6  Through-coolant  Machining strategy  HPC	Coating	TiAlN
Point angle 135 degrees  Shank DIN 6535 HA to h6  Through-coolant yes, to 25 bar  Machining strategy HPC	Tool material	Solid carbide
Shank DIN 6535 HA to h6 Through-coolant yes, to 25 bar Machining strategy HPC	Drill depth up to	12×D
Through-coolant yes, to 25 bar  Machining strategy HPC	Point angle	135 degrees
Machining strategy HPC	Shank	DIN 6535 HA to h6
	Through-coolant	yes, to 25 bar
Colour ring green	Machining strategy	HPC
	Colour ring	green
Type of product Jobber drill	Type of product	Jobber drill

# **Services**

Shank grinding Type HE 129100 HE