

GARANT Master Steel SPEED solid carbide drill, plain shank DIN 6535 HA, TiAIN, Ø DC h7: 9,1 mm



Order data

Order number	123225 9,1
GTIN	4045197845405
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 L₂: 106.4 mm

Overall length L: 162 mm Shank Ø D_s: 10 mm

Feed f in steel < 1100 N/mm²: 0.18 mm/rev.

Technical description

Overall length L 162 mm Feed f in steel < 1100 N/mm² 0.18 mm/rev. Flute length L₂ 120 mm Tolerance nominal Ø h7 Number of cutting edges Z 2 recommended maximum drilling depth L₂ 106.4 mm Standard Manufacturer's standard Nominal Ø D₂ 9.1 mm Shank Ø D₃ 10 mm 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 Type of product Jobber drill		
Flute length L _c Tolerance nominal Ø h7 Number of cutting edges Z recommended maximum drilling depth L ₂ 106.4 mm Standard Manufacturer's standard Nominal Ø D _c 9.1 mm Shank Ø D _s 10 mm Semi-Standard Semi-Standard Yes Series GARANT Master Steel Coating TiAIN Tool material Solid carbide Drill depth up to 12×D Point angle Shank DIN 6535 HA to h6 Through-coolant Machining strategy HPC Colour ring green	Overall length L	162 mm
Tolerance nominal Ø h7 Number of cutting edges Z recommended maximum drilling depth L2 106.4 mm Standard Manufacturer's standard Nominal Ø Dc 9.1 mm Shank Ø Ds 10 mm Semi-Standard yes Series GARANT Master Steel Coating TiAIN Tool material Drill depth up to 12×D Point angle Shank DIN 6535 HA to h6 Through-coolant Manufacturer's standard Manufactu	Feed f in steel < 1100 N/mm ²	0.18 mm/rev.
Number of cutting edges Z recommended maximum drilling depth L₂ 106.4 mm Standard Manufacturer's standard Nominal Ø Dc 9.1 mm Shank Ø Ds 10 mm Semi-Standard yes Series GARANT Master Steel Coating TiAlN Tool material Solid carbide Drill depth up to 12×D Point angle Shank DIN 6535 HA to h6 Through-coolant Machining strategy HPC Colour ring green	Flute length L _c	120 mm
recommended maximum drilling depth L_2 106.4 mm Standard Manufacturer's standard Nominal \varnothing D_c 9.1 mm Shank \varnothing D_s 10 mm 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 Colour ring green	Tolerance nominal Ø	h7
StandardManufacturer's standardNominal Ø Dc9.1 mmShank Ø Ds10 mmSemi-StandardyesSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle135 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCColour ringgreen	Number of cutting edges Z	2
Nominal Ø Dc 9.1 mm Shank Ø Ds 10 mm 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 Colour ring green	recommended maximum drilling depth L ₂	106.4 mm
Shank Ø D₅10 mmSemi-StandardyesSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle135 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCColour ringgreen	Standard	Manufacturer's standard
Semi-StandardyesSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle135 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCColour ringgreen	Nominal Ø D _C	9.1 mm
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 Colour ring green	Shank Ø D₅	10 mm
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 Colour ring green	Semi-Standard	yes
Tool material Drill depth up to 12×D Point angle 135 degrees Shank DIN 6535 HA to h6 Through-coolant Machining strategy HPC Colour ring Solid carbide 12×D 13×D 135 degrees HA to h6 Through-coolant yes, to 25 bar HPC green	Series	GARANT Master Steel
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	Coating	TiAIN
Point angle 135 degrees Shank DIN 6535 HA to h6 Through-coolant yes, to 25 bar Machining strategy HPC Colour ring green	Tool material	Solid carbide
Shank DIN 6535 HA to h6 Through-coolant yes, to 25 bar Machining strategy HPC Colour ring green	Drill depth up to	12×D
Through-coolant yes, to 25 bar Machining strategy HPC Colour ring green	Point angle	135 degrees
Machining strategy HPC Colour ring green	Shank	DIN 6535 HA to h6
Colour ring green	Through-coolant	yes, to 25 bar
	Machining strategy	HPC
Type of product Jobber drill	Colour ring	green
	Type of product	Jobber drill

Services

Shank grinding Type HE 129100 HE