Garant

GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TiAIN, Ø DC h7: 4,4 mm

Order data

Order number	123235 4,4
GTIN	4045197840257
Item class	11E

Description

Version:

3-flute drill, specially developed for **use at very high feed rates**. Outstandingly suitable for **machines with high installed power** and stable operating conditions.

- Special cutter geometry with stable cutting edges and large clearance at the centre enables very high feed rates.
- The patented tip is optimised for chip flow and generates low cutting pressure with good chip breakage.
- The sector-leading technology of the drill point guarantees optimum self-centring behaviour. 3 guide chamfers guarantee a stable exit from the hole and an exact roundness of the hole.

Recommendation:

Maximum drilling depth:

flute length (see table) less $1.5 \times nominal \emptyset$.

Note:

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Flute length L_c = L_2 + 1.5 \times D_c.
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For process reliability when using the 12×D drill, an initial centre drilling with an NC spotting drill No. 121130 with **155° point angle** is necessary.

Standard: Manufacturer's standard

Tolerance nominal Ø: h7

Number of cutting edges Z: 3

Tolerance nominal Ø: h7

recommended maximum drilling depth L₂: 57.4 mm

Overall length L: 102 mm

Shank Ø D_s: 6 mm

Feed f in steel < 1100 N/mm²: 0.28 mm/rev.

Technical description

Overall length L102 mmStandardManufacturer's standardTolerance nominal Øh7recommended maximum drilling depth L257.4 mmFeed f in steel < 1100 N/mm20.28 mm/rev.Flute length L264 mmNominal Ø D24.4 mmNumber of cutting edges Z3SeriesGARANT Master SteelCoatingTIAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-Standardyes	Shank Ø D _s	6 mm
Tolerance nominal Øh7recommended maximum drilling depth L257.4 mmFeed f in steel < 1100 N/mm2	Overall length L	102 mm
recommended maximum drilling depth L ₂ 57.4 mm Feed f in steel < 1100 N/mm ² 0.28 mm/rev. Flute length L _c 64 mm Nominal Ø D _c 4.4 mm Number of cutting edges Z 3 Series GARANT Master Steel Coating TiAlN Tool material Solid carbide Drill depth up to 12×D Point angle 140 degrees Shank DIN 6535 HA to h6 Through-coolant yes, to 25 bar Machining strategy HPC Semi-Standard yes	Standard	Manufacturer's standard
Feed f in steel < 1100 N/mm²0.28 mm/rev.Flute length Lc64 mmNominal Ø Dc4.4 mmNumber of cutting edges Z3SeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-Standardyes	Tolerance nominal Ø	h7
Flute length L,64 mmNominal Ø Dc4.4 mmNumber of cutting edges Z3SeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-Standardyes	recommended maximum drilling depth L_2	57.4 mm
Nominal Ø Dc4.4 mmNumber of cutting edges Z3SeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-Standardyes	Feed f in steel < 1100 N/mm ²	0.28 mm/rev.
Number of cutting edges Z3SeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-Standardyes	Flute length L _c	64 mm
SeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-Standardyes	Nominal Ø D _c	4.4 mm
CoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-Standardyes	Number of cutting edges Z	3
Tool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-Standardyes	Series	GARANT Master Steel
Drill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-Standardyes	Coating	TiAIN
Point angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-Standardyes	Tool material	Solid carbide
ShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-Standardyes	Drill depth up to	12×D
Through-coolantyes, to 25 barMachining strategyHPCSemi-Standardyes	Point angle	140 degrees
Machining strategyHPCSemi-Standardyes	Shank	DIN 6535 HA to h6
Semi-Standard yes	Through-coolant	yes, to 25 bar
	Machining strategy	HPC
	Semi-Standard	yes
Colour ring green	Colour ring	green
Type of product Jobber drill	Type of product	Jobber drill

Services

Shank grinding Type HE	129100 HE
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