Garant

GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TIAIN, Ø DC h7: 15,2 mm

Order data

Order number	123235 15,2
GTIN	4045197841148
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:

```
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 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: 185.2 mm

Overall length L: 260 mm

Shank Ø D_s: 16 mm

Feed f in steel < 1100 N/mm²: 0.61 mm/rev.

Technical description

Tolerance nominal Øh7Feed f in steel < 1100 N/mm²0.61 mm/rev.Overall length L260 mmShank Ø D,16 mmrecommended maximum drilling depth L2185.2 mmNominal Ø Dc15.2 mmFlute length Lc208 mmFlute length Lc208 mmNumber of cutting edges Z3StandardManufacturer's standardSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-StandardyesColour ringgreen		
Overall length L260 mmShank Ø D,16 mmrecommended maximum drilling depth L2185.2 mmNominal Ø Dc15.2 mmFlute length Lc208 mmNumber of cutting edges Z3StandardManufacturer's standardSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Tolerance nominal Ø	h7
Shank Ø Ds16 mmrecommended maximum drilling depth L2185.2 mmNominal Ø Dc15.2 mmFlute length Lc208 mmNumber of cutting edges Z3StandardManufacturer's standardSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Feed f in steel < 1100 N/mm ²	0.61 mm/rev.
recommended maximum drilling depth L ₂ 185.2 mm Nominal Ø D _c 15.2 mm Flute length L _c 208 mm Number of cutting edges Z 3 Standard 3 Standard GARANT Master Steel Coating TiAlN Tool material 5 Drill depth up to 12×D Point angle 140 degrees Shank 5 Nank 5 Through-coolant yes, to 25 bar Machining strategy 4 Semi-Standard yes	Overall length L	260 mm
Nominal Ø Dc15.2 mmFlute length Lc208 mmNumber of cutting edges Z3StandardManufacturer's standardSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Shank Ø D _s	16 mm
Flute length L c208 mmNumber of cutting edges Z3StandardManufacturer's standardSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angleJ140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyJesSemi-StandardyesColour ringgreen	recommended maximum drilling depth L_2	185.2 mm
Number of cutting edges Z3StandardManufacturer's standardSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Nominal Ø D _c	15.2 mm
StandardManufacturer's standardSeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Flute length L _c	208 mm
SeriesGARANT Master SteelCoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Number of cutting edges Z	3
CoatingTiAINTool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Standard	Manufacturer's standard
Tool materialSolid carbideDrill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Series	GARANT Master Steel
Drill depth up to12×DPoint angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Coating	TiAIN
Point angle140 degreesShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Tool material	Solid carbide
ShankDIN 6535 HA to h6Through-coolantyes, to 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Drill depth up to	12×D
Through-coolantyes, to 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Point angle	140 degrees
Machining strategyHPCSemi-StandardyesColour ringgreen	Shank	DIN 6535 HA to h6
Semi-Standard yes Colour ring green	Through-coolant	yes, to 25 bar
Colour ring green	Machining strategy	HPC
	Semi-Standard	yes
	Colour ring	green
Type of product Jobber drill	Type of product	Jobber drill

Services

Shank grinding Type HE	129100 HE
------------------------	-----------