Garant

GARANT Master TM plain shank thread mill with countersink 2×D, TiAIN, M: M10



Order data

Order number	139653 M10
GTIN	4045197957788
Item class	11D

Description

Version:

Solid carbide thread milling cutters with irregular cutting edge spacing and an increased number of cutting edges. Due to the irregular cutting edge spacing they achieve very smooth running and long tool life.

Newly developed universal geometry and **high-performance coating** for use across a wide spectrum of materials.

- \cdot Significantly reduced vibration due to irregular cutting edge spacing
- · Increased number of cutting edges
- · New coating for optimum wear resistance
- · Corrected thread profile for avoidance of profile distortions

Advantage:

Incorporating a countersink profile for a 90° countersink and thread milling in a single operation. **Note:**

Form HB and HE supplied at the same price as HA. Form HB: order with No. 139656 + 129100 HB Form HE: order with No. 139656 + 129100 HE Form HB: order with No. 139653 + 129100 HB Form HE: order with No. 139653 + 129100 HE Form HB: order with No. 139654 + 129100 HB Form HE: order with No. 139654 + 129100 HE. Through-coolant: yes No. of teeth Z: 6 Thread pitch: 1.5 mm Nominal \emptyset D_c: 8.1 mm Shank length L_s: 45 mm Overall length L: 82 mm

Data sheet

Shank Ø D_s: 12 mm maximum countersink Ø D₁: 10.5 mm

Technical description

Overall length L82 mmFeed f, in steel < 750 N/mm²0.075 mmmaximum countersink Ø D,10.5 mmThrough-coolantyesProgramming value for countersink I,21.45 mmShank Ø D,12 mmShank length L,45 mmNo. of teeth Z6Thread depth20 mmThread sizeM10Nominal Ø Dc8.1 mmCoatingMThread typeMThread typeMFlank angle60 degreesTool materialSolid carbideThread standardDIN 6335 HA to h6Application for type of drillingunequal spacingSpacing of the cutters90 degreesShank tolerance90 degrees	Number of clamping slots	6
Feed f, in steel < 750 N/mm ² 0.075 mm maximum countersink Ø D, 10.5 mm Through-coolant yes Programming value for countersink I, 21.45 mm Shank Ø D, 12 mm Shank Ø D, 45 mm Shank Ø D, 6 Thread height L, 45 mm No. of teeth Z 6 Thread depth 20 mm Thread size M10 Nominal Ø Dc 8.1 mm Coating Mill Thread type M Flank angle 60 degrees Tool material Solid carbide Thread standard DIN 6535 HA to h6 Application for type of drilling up to 2xD for blind holes and through holes Spacing of the cutters unequal spacing Countersink angle 90 degrees Shank tolerance h6	Thread pitch	1.5 mm
maximum countersink Ø D, 10.5 mm 10.5 mm 10.7 mm 100 yes 900 yes 900 yes 12.45 mm 21.45 mm 21	Overall length L	82 mm
Through-coolantyesProgramming value for countersink I,21.45 mmShank Ø D,12 mmShank length L,45 mmNo. of teeth Z6Thread depth20 mmThread sizeM10Nominal Ø Dc8.1 mmCoatingTiAINThread typeMThread typeMThread typeMThread size00 degreesTool materialSolid carbideTool materialDIN 6535 HA to h6Application for type of drillingunequal spacingSpacing of the cuttersunequal spacingShank tolerance90 degrees	Feed f _z in steel < 750 N/mm ²	0.075 mm
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Application for type of drillingup to 2×D for blind holes and through holesSpacing of the cuttersunequal spacingCountersink angle90 degreesShank toleranceh6	Thread standard	DIN 13
Application for type of drilling holes and through holes Spacing of the cutters unequal spacing Countersink angle 90 degrees Shank tolerance h6	Shank	DIN 6535 HA to h6
Countersink angle90 degreesShank toleranceh6	Application for type of drilling	•
Shank tolerance h6	Spacing of the cutters	unequal spacing
	Countersink angle	90 degrees
Colour ring green	Shank tolerance	h6
	Colour ring	green

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Internal/external application	Indvendig
Series	GARANT Master TM
Type of product	thread milling cutter
Services	
Shank grinding Type HE	129100 HE
Shank grinding Type HB	129100 HB