

GARANT Master TM plain shank thread mill with countersink 2×D, TiAIN, MF: 4X0,5



Order data

Order number	139682 4X0,5
GTIN	4045197956910
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.

- · 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. 139682 + 129100 HB**

Form **HE**: order with **No. 139682 + 129100 HE**

Form **HB**: order with **No. 139683 + 129100 HB**

Form **HE**: order with **No. 139683 + 129100 HE**

Order HB shank: with No. 139682 + 129100 HB

Order HE shank: with No. 139682 + 129100 HE

Through-coolant: yes

No. of teeth Z: 4

Thread pitch: 0.5 mm Nominal Ø D_c: 3.29 mm Shank length L_s: 36 mm Overall length L: 58 mm

Shank Ø D_s: 6 mm

maximum countersink Ø D₁: 4.5 mm

Technical description

Through-coolant Thread pitch No. of teeth Z A maximum countersink Ø D₁ Shank Ø D₂ Programming value for countersink l₁ Thread depth Read f₂ in steel < 750 N/mm² Nourber of clamping slots A Overall length L S8 mm Thread size M4×0.5 Nominal Ø D₂ Coating TiAlN Thread type MF Thread type MF-LH Flank angle Tool material Shank DIN 635 HA to h6 Application for type of drilling Spacing of the cutters Colour ring Colour ring Internal /external application Shank Series GARANT Master TM	Shank length L₅	36 mm
No. of teeth Z maximum countersink Ø D₁ Shank Ø D₄ Programming value for countersink l₁ Thread depth Feed f₂ in steel < 750 N/mm² Number of clamping slots Overall length L Thread size M4×0.5 Nominal Ø D₂ Coating TiAlN Thread type Thread type Thread type Thread type Thread standard Solid carbide Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling Countersink angle Countersink angle Countersink angle Gour ring Countersink angle Countersink angle Colour ring Green Internal/external application	Through-coolant	yes
maximum countersink Ø D₁ 4.5 mm Shank Ø D₄ 6 mm Programming value for countersink l₁ 8.86 mm Thread depth 8 mm Feed f₂ in steel < 750 N/mm² 0.02 mm Number of clamping slots 4 Overall length L 58 mm Thread size M4×0.5 Nominal Ø D₂ 3.29 mm Coating TiAlN Thread type MF Thread type MF Thread type MF-LH Flank angle 60 degrees Tool material Solid carbide Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling up to 2×D for blind holes and through holes Spacing of the cutters unequal spacing Countersink angle 90 degrees Colour ring green Internal/external application Internal	Thread pitch	0.5 mm
Shank Ø D₀ 6 mm Programming value for countersink I₀ 8.86 mm Thread depth 8 mm Feed f₂ in steel < 750 N/mm²	No. of teeth Z	4
Programming value for countersink I₁ Thread depth 8 mm Feed f₂ in steel < 750 N/mm² 0.02 mm Number of clamping slots 4 Overall length L 58 mm Thread size M4×0.5 Nominal Ø D₂ Coating TiAIN Thread type MF Thread type MF-LH Flank angle 60 degrees Tool material Solid carbide Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling Spacing of the cutters Countersink angle Countersink angle Goldegrees Colour ring Gountersink angle Goldegrees Tool material DIN 13 DIN 6535 HA to h6 Application for type of drilling Gountersink angle Gountersink angle Goldegrees Tool material DIN 13 DIN 6535 HA to h6 Application for type of drilling Spacing of the cutters Unequal spacing Countersink angle Goldegrees Tool material DIN 13 DIN 6535 HA to h6 Application for type of drilling Thread spacing Thread spacing	maximum countersink Ø D ₁	4.5 mm
Thread depth 8 mm Feed f _e in steel < 750 N/mm² 0.02 mm Number of clamping slots 4 Overall length L 58 mm Thread size M4×0.5 Nominal Ø D _c 3.29 mm Coating TiAIN Thread type MF Thread type MF-LH Flank angle 60 degrees Tool material Solid carbide Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling up to 2×D for blind holes and through holes Spacing of the cutters unequal spacing Countersink angle 90 degrees Colour ring green Internal/external application Internal	Shank Ø D _s	6 mm
Feed f₂ in steel < 750 N/mm²	Programming value for countersink I ₁	8.86 mm
Number of clamping slots 4 Overall length L 58 mm Thread size M4×0.5 Nominal Ø Dc 3.29 mm Coating TiAIN Thread type MF Thread type MF-LH Flank angle 60 degrees Tool material Solid carbide Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling up to 2×D for blind holes and through holes Spacing of the cutters unequal spacing Countersink angle 90 degrees Colour ring green Internal/external application Internal	Thread depth	8 mm
Overall length L 58 mm Thread size M4×0.5 Nominal Ø Dc 3.29 mm Coating TiAIN Thread type MF Thread type MF-LH Flank angle 60 degrees Tool material Solid carbide Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling up to 2×D for blind holes and through holes Spacing of the cutters unequal spacing Countersink angle 90 degrees Colour ring green Internal/external application Internal	Feed f_z in steel < 750 N/mm ²	0.02 mm
Thread size M4×0.5 Nominal Ø Dc 3.29 mm Coating TiAIN Thread type MF Thread type MF-LH Flank angle 60 degrees Tool material Solid carbide Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling up to 2×D for blind holes and through holes Spacing of the cutters unequal spacing Countersink angle 90 degrees Colour ring green Internal/external application Internal	Number of clamping slots	4
Nominal Ø D _c Coating TiAIN Thread type MF Thread type MF-LH Flank angle 60 degrees Tool material Solid carbide Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling Application for type of drilling Spacing of the cutters unequal spacing Countersink angle Golour ring Internal/external application	Overall length L	58 mm
Coating TiAIN Thread type MF Thread type MF-LH Flank angle 60 degrees Tool material Solid carbide Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling up to 2×D for blind holes and through holes Spacing of the cutters unequal spacing Countersink angle 90 degrees Colour ring green Internal/external application Internal	Thread size	M4×0.5
Thread type Thread type MF MF-LH Flank angle 60 degrees Tool material Solid carbide Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling Application for type of drilling Countersink angle Countersink angle Guntersink angle Thread standard DIN 6535 HA to h6 Up to 2×D for blind holes and through holes Flack and through holes Flack angle 90 degrees Colour ring green Internal/external application Internal	Nominal Ø D _c	3.29 mm
Thread type MF-LH Flank angle 60 degrees Tool material Solid carbide Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling up to 2×D for blind holes and through holes Spacing of the cutters unequal spacing Countersink angle 90 degrees Colour ring green Internal/external application Internal	Coating	TiAIN
Flank angle 60 degrees Tool material Solid carbide Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling up to 2×D for blind holes and through holes Spacing of the cutters unequal spacing Countersink angle 90 degrees Colour ring green Internal/external application Internal	Thread type	MF
Tool material Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling Application for type of drilling Spacing of the cutters Countersink angle Colour ring Internal/external application Solid carbide DIN 13 DIN 6535 HA to h6 up to 2×D for blind holes and through holes unequal spacing 90 degrees Internal	Thread type	MF-LH
Thread standard DIN 13 Shank DIN 6535 HA to h6 Application for type of drilling Application for type of drilling Spacing of the cutters Unequal spacing Countersink angle Solour ring Internal/external application DIN 13 DIN 13 DIN 13 DIN 13 Application 13 Up to 2×D for blind holes and through holes Unequal spacing 90 degrees Internal	Flank angle	60 degrees
Shank Application for type of drilling Spacing of the cutters Countersink angle Colour ring Internal/external application DIN 6535 HA to h6 up to 2×D for blind holes unequal spacing unequal spacing 90 degrees Internal	Tool material	Solid carbide
Application for type of drilling Up to 2×D for blind holes and through holes Spacing of the cutters Unequal spacing Countersink angle 90 degrees Colour ring green Internal/external application Internal	Thread standard	DIN 13
Application for type of drilling Spacing of the cutters Countersink angle Colour ring Internal/external application holes and through holes unequal spacing 90 degrees green Internal	Shank	DIN 6535 HA to h6
Countersink angle 90 degrees Colour ring green Internal/external application Internal	Application for type of drilling	•
Colour ring green Internal/external application Internal	Spacing of the cutters	unequal spacing
Internal/external application Internal	Countersink angle	90 degrees
	Colour ring	green
Series GARANT Master TM	Internal/external application	Internal
	Series	GARANT Master TM

Type of product	thread milling cutter
Services	
Shank grinding Type HB	129100 HB
Shank grinding Type HE	129100 HE