## Garant

# GARANT Master TM plain shank thread mill with countersink 2×D, TiAIN, UNC: 3/4-10



### Order data

Order number	139723 3/4-10
GTIN	4062406058272
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.
- $\cdot\,$  Corrected thread profile for avoidance of profile distortions.

#### Advantage:

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

For **UNC unified coarse threads** ASME-B1.1. **Note:** 

Form HB and HE supplied at the same price as HA. Form **HB**: order with **No. 139723 + 129100 HB** Form **HE**: order with **No. 139723 + 129100 HE** Thread type: UNC Thread type: UNC-LH No. of teeth Z: 6 Threads per inch: 10 Nominal  $\emptyset$  D<sub>c</sub>: 15.9 mm Flute length L<sub>c</sub>: 39.29 mm Shank length L<sub>s</sub>: 50 mm Overall length L: 120 mm Shank Ø D<sub>s</sub>: 20 mm

# **Technical description**

Overall length L	120 mm	
Thread Ø		
	19.05 mm	
Shank $\emptyset$ D <sub>s</sub>	20 mm	
Thread pitch	2.54 mm	
Shank length $L_s$	50 mm	
No. of teeth Z	6	
Thread type	UNC	
Thread type	UNC-LH	
Threads per inch	10	
Number of clamping slots	6	
Flute length L <sub>c</sub>	39.29 mm	
Feed f <sub>z</sub> in steel < 750 N/mm <sup>2</sup>	0.13 mm	
Thread size	3/4-10 UNC	
Nominal Ø D <sub>c</sub>	15.9 mm	
Programming value for countersink L <sub>1</sub>	41.12 mm	
Neck Ø D <sub>1</sub>	19.6 mm	
Series	Master TM	
Coating	TiAIN	
Flank angle	60 °	
Tool material	solid carbide	
Shank	DIN 6535 HA with h6	
Through-coolant	yes	
Cutting direction	right-hand	
Application for type of drilling	up to 2×D for blind holes	
Application for type of drilling	up to 2×D for through holes	
Spacing of the cutters	unequal spacing	

Countersink angle	90 °	
Shank tolerance	h6	
Colour ring	green	
Internal/external application	Internal	
Type of product	thread milling cutter	

## User data

	Suitability	V <sub>c</sub>	ISO code
Alu plastics	Suitable	220 m/min	Ν
Aluminium (short chipping)	suitable	220 m/min	Ν
Alu > 10% Si	Suitable	180 m/min	Ν
Steel < 500 N/mm <sup>2</sup>	Suitable	140 m/min	Р
Steel < 750 N/mm <sup>2</sup>	Suitable	130 m/min	Р
Steel < 900 N/mm <sup>2</sup>	Suitable	120 m/min	Р
Steel < 1100 N/mm <sup>2</sup>	Suitable	90 m/min	Р
Steel < 1400 N/mm <sup>2</sup>	Suitable	80 m/min	Р
Steel < 50 HRC	suitable only under restricted conditions	45 m/min	н
TOOLOX 33	Suitable	85 m/min	Н
TOOLOX 44	Suitable	50 m/min	Н
INOX < 900 N/mm <sup>2</sup>	Suitable	82 m/min	М
INOX > 900 N/mm <sup>2</sup>	Suitable	75 m/min	М
Ti > 850 N/mm <sup>2</sup>	Suitable	50 m/min	S
GG(G)	Suitable	120 m/min	К
CuZn	Suitable	200 m/min	Ν
Uni	Suitable		
wet maximum	Suitable		
wet minimum	Suitable		

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<del>Air</del> Services	Suitable	
Shank grinding Type HB	}	129100 HB
Shank grinding Type HE		129100 HE