

# GARANT Master TM plain shank thread mill with countersink 2.5×D, TiAIN, M: M12



#### **Order data**

Order number	139654 M12
GTIN	4045197957863
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. 139656 + 129100 HB** 

Form **HE**: order with **No. 139656 + 129100 HE** 

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Form **HE**: order with **No. 139653 + 129100 HE** 

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Form **HE**: order with **No. 139654 + 129100 HE**.

Through-coolant: yes

No. of teeth Z: 6

Thread pitch: 1.75 mm Nominal  $\varnothing$  D<sub>c</sub>: 9.8 mm Shank length L<sub>s</sub>: 45 mm Overall length L: 94 mm Shank Ø D<sub>s</sub>: 14 mm

maximum countersink  $\emptyset$  D<sub>1</sub>: 12.5 mm

## **Technical description**

Through-coolant	yes
Thread pitch	1.75 mm
Feed f <sub>z</sub> in steel < 750 N/mm <sup>2</sup>	0.09 mm
Shank Ø D <sub>s</sub>	14 mm
maximum countersink Ø D <sub>1</sub>	12.5 mm
Overall length L	94 mm
Programming value for countersink I <sub>1</sub>	31.98 mm
Shank length L <sub>s</sub>	45 mm
No. of teeth Z	6
Number of clamping slots	6
Thread depth	24 mm
Thread size	M12
Nominal Ø D <sub>c</sub>	9.8 mm
Coating	TiAIN
Thread type	M
Thread type	M-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 2.5×D for blind holes and through holes
Spacing of the cutters	unequal spacing
Countersink angle	90 degrees
Shank tolerance	h6
Colour ring	green

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