

## Garant

### GARANT Master TM plain shank thread mill with countersink 2.5×D, TiAlN, M: M4



#### Order data

Order number	139654 M4
GTIN	4045197956903
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**

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: 4

Thread pitch: 0.7 mm

Nominal  $\varnothing D_c$ : 3.1 mm

Shank length  $L_s$ : 36 mm

Overall length L: 58 mm

Shank  $\varnothing D_s$ : 6 mm  
 maximum countersink  $\varnothing D_1$ : 4.5 mm

## Technical description

No. of teeth Z	4
maximum countersink $\varnothing D_1$	4.5 mm
Thread depth	8 mm
Shank length $L_s$	36 mm
Thread pitch	0.7 mm
Overall length L	58 mm
Through-coolant	yes
Shank $\varnothing D_s$	6 mm
Feed $f_z$ in steel < 750 N/mm <sup>2</sup>	0.02 mm
Programming value for countersink $l_1$	10.85 mm
Number of clamping slots	4
Thread size	M4
Nominal $\varnothing D_c$	3.1 mm
Coating	TiAlN
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 HE	129100 HE
Shank grinding Type HB	129100 HB