

Garant
GARANT Master TM end cutting thread mill 2.5×D, AlCrN, M: M3

Order data

Order number	139526 M3
GTIN	4067263290612
Item class	11D

Description
Version:

- **Significantly reduced vibrations due to irregular cutting edge spacing.**
- **New coating for optimum wear resistance.**
- **Cooling grooves on the shank for targeted coolant feed.**
- **Corrected thread profile for avoidance of profile distortions.**

The special front cutter geometry **with unequal spacing** permits **process-reliable circular thread milling** across a **wide spectrum of materials**. The **side cooling grooves** on the shank ensure **outstanding coolant feed** without weakening the tool core and thus offer **maximum process reliability even in unstable conditions**. All tools have left-hand cutting and are suitable for **right-hand and left-hand threads**.

Note:

HB and HE shanks are available at the same price as HA.

HB shank: order with No. **139526 + 129100 HB**.

HE shank: order with No. **139526 + 129100 HE**.

Technical description

Thread pitch	0.5 mm
Thread depth	7.5
Neck Ø D ₁	1.65 mm
Shank Ø D _s	6 mm
Cutter length l _c	1 mm
Thread size	M3
Programming radius	1.135 mm

Number of clamping slots	4
Overall length L	58 mm
Series	Master TM
Cutting edge $\varnothing D_c$	2.33 mm
Overhang L_1	8 mm
Shank length L_s	36 mm
Feed f_z in steel $< 750 \text{ N/mm}^2$	0.015 mm
Through-coolant	yes
Coating	AlCrN
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
Number of cutting edges Z	4
Application for type of drilling	up to 2.5×D for blind holes
Application for type of drilling	up to 2.5×D for through holes
Cutting direction	left-hand
Spacing of the cutters	unequal spacing
Shank tolerance	h6
Colour ring	green
Internal/external application	Internal
Type of product	Drill thread milling cutters

User data

	Suitability	V_c	ISO code
Alu plastics	suitable	220 m/min	N

Aluminium (short chipping)	suitable	220 m/min	N
Alu > 10% Si	suitable	180 m/min	N
Steel < 500 N/mm ²	suitable	140 m/min	P
Steel < 750 N/mm ²	suitable	130 m/min	P
Steel < 900 N/mm ²	suitable	120 m/min	P
Steel < 1100 N/mm ²	suitable	90 m/min	P
Steel < 1400 N/mm ²	suitable	80 m/min	P
TOOLOX 33	suitable	85 m/min	H
TOOLOX 44	suitable	50 m/min	H
INOX < 900 N/mm ²	suitable	82 m/min	M
INOX > 900 N/mm ²	suitable	75 m/min	M
Ti > 850 N/mm ²	suitable	50 m/min	S
GG(G)	suitable	120 m/min	K
CuZn	suitable	200 m/min	N
Uni	suitable		
wet maximum	suitable		
Air	suitable		

Services

Shank grinding Type HE	129100 HE
Shank grinding Type HB	129100 HB