Data sheet

Garant

GARANT Master TM solid carbide single profile thread mill 3×D, AlTiN, M: M5

Order data

Order number	139625 M5
GTIN	4067263139973
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 cutting action** 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.**
· **Latest-generation AlTiN-based HIPIMS coating.**
· **Corrected thread profile for avoidance of profile distortions.**
Axial cooling grooves on the shank.
Advantage:
Significantly **less radial pressure** than with multi-tooth thread mills. The tool can also be used for additional thread profiles (UN; UN-LH) **for various pitches and diameters**. See overview for possible threads.
Note:
HB and HE shanks are available at the same price as HA.
HB shank: order with No. **139625 + 129100 HB**.
HE shank: order with No. **139625 + 129100 HE**.

Technical description

Through-coolant	yes
Shank ∅ D_s	6 mm
Overall length L	58 mm
No. of teeth Z	6

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Nominal ⌀ D_C	3.9 mm
Shank length L_s	39.5 mm
Thread pitch range	0.35 - 0.8 mm
Flute length L_c	1.06 mm
Overhang L_1	15.4 mm
Feed f_z in steel < 1400 N/mm^2	0.03 mm
Thread depth	15 mm
Thread size	M5
Number of clamping slots	6
Feed f_z in CRP	0.04 mm
Thread profile	Partial profile
Coating	AlTiN
Thread type	M
Thread type	UN
Thread type	M-LH
Thread type	UN-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 3×D for through holes
Application for type of drilling	up to 3×D for blind holes
Spacing of the cutters	unequal spacing
Shank tolerance	h6
Colour ring	green
Internal/external application	Internal
Series	Master TM
Type of product	thread milling cutter

User data

	Suitability	V_c	ISO code
Alu plastics	suitable	200 m/min	N
Aluminium (short chipping)	suitable	190 m/min	N
Alu > 10% Si	suitable	160 m/min	N
Steel < 500 N/mm²	suitable	125 m/min	P
Steel < 750 N/mm²	suitable	115 m/min	P
Steel < 900 N/mm²	suitable	110 m/min	P
Steel < 1100 N/mm²	suitable	80 m/min	P
Steel < 1400 N/mm²	suitable	70 m/min	P
Steel < 55 HRC	suitable	45 m/min	H
Steel < 60 HRC	suitable only under restricted conditions	35 m/min	H
INOX < 900 N/mm²	suitable	75 m/min	M
INOX > 900 N/mm²	suitable	70 m/min	M
Ti > 850 N/mm²	suitable	45 m/min	S
CuZn	suitable	175 m/min	N
GRP	suitable	100 m/min	N
CRP	suitable	100 m/min	N
Graphite	suitable	150 m/min	N
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable		
Air	suitable		