Garant

GARANT Master TM plain shank thread mill with countersink 2.5×D, AlTiN, M: M5

Order data

Order number	139664 M5
GTIN	4067263128465
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.**
· **Latest-generation AlTiN-based HiPIMS coating.**
· **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:
HB and HE shanks are available at the same price as HA.
Order **HB** shank: with **No. 139664 + 129100 HB**.
Order **HE** shank: with **No. 139664 + 129100 HE**.

Technical description

Thread pitch	0.8 mm
Flute length L_c	13.2 mm
No. of teeth Z	4
Overall length L	64 mm

Thread depth	13.2 mm
Feed f_z in steel < 750 N/mm^2	0.035 mm
Number of clamping slots	4
Nominal Ø D_C	3.9 mm
Shank length L_s	39.7 mm
Thread size	M5
Neck Ø D_1	5.75 mm
Through-coolant	yes
Shank Ø D_s	6 mm
Programming value for countersink L_1	14 mm
Coating	AlTiN
Thread type	M-LH
Thread type	M
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×D for blind holes
Application for type of drilling	up to 2.5×D for through holes
Spacing of the cutters	unequal spacing
Countersink angle	90 degrees
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
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
GG(G)	suitable	105 m/min	K
CuZn	suitable	175 m/min	N
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable		
Air	suitable		

Services

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