

Garant**GARANT Master Form Steel Fluteless machine tap with oil grooves HSS-E-PM IC / Form C 6HX, TiAlN, M: M5****Order data**

Order number	139202 M5
GTIN	4062406373566
Item class	11I

Description**Version:**

DIN 2174 (\approx DIN 371 \leq M10; \approx DIN 376 \geq M12). **With oil grooves; optimum lubrication effect even in deeper threads.**

Tolerance class: ISO 2X/6HX.

The latest generation of **high-performance fluteless taps**, specially developed for **use in steel materials**.

- **Optimised polygon geometry for a lower torque.**
- **Multi-layer HIPIMS coating for high wear resistance.**
- **HSS-E-PM substrate for exceptional process reliability.**

With internal coolant feed laterally from the grooves. Permits the longest possible tool life when machining through holes and blind holes.

Technical description

Thread pitch	0.8 mm
Tapping hole Ø guide value	4.65 mm
Shank Ø D _s	6 mm
Series	GARANT Master
Thread Ø	5 mm
Number of clamping slots	5
Overall length L	70 mm
Tolerance class	ISO 2X 6HX

Data sheet

Thread depth	15 mm
Number of cutting edges Z	5
Shank square □	4.9 mm
Thread size	M5
Coating	TiAlN
Thread type	M
Flank angle	60 degrees
Tool material	HSS E PM
Standard	DIN 2174
Thread standard	DIN 13
Taper lead form	C
Shank	Plain shank with h9
Through-coolant	yes
Application for type of drilling	up to 3×D for blind holes
Application for type of drilling	up to 3×D for through holes
Cutting direction	right-hand
Colour ring	without
Type of product	Fluteless tap

User data

	Suitability	V _c	ISO code
Aluminium (short chipping)	suitable	42 m/min	N
Steel < 500 N/mm ²	suitable	40 m/min	P
Steel < 750 N/mm ²	suitable	38 m/min	P
Steel < 900 N/mm ²	suitable	29 m/min	P
Steel < 1100 N/mm ²	suitable	20 m/min	P
Steel < 1400 N/mm ²	suitable	15 m/min	P
INOX < 900 N/mm ²	suitable	15 m/min	M

Data sheet

INOX > 900 N/mm ²	suitable	8 m/min	M
CuZn	suitable	25 m/min	N
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		