

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

Order number	139194 M5
GTIN	4062406381172
Item class	11I

Description**Version:****DIN 2174** (\approx DIN 371 \leq M10; \approx DIN 376 \geq M12).**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.**

Technical description

Shank square <input type="checkbox"/>	4.9 mm
Thread depth	15 mm
Overall length L	70 mm
Tolerance class	ISO 2X 6HX
Shank \varnothing D _s	6 mm
Number of cutting edges Z	5
Thread size	M5
Series	GARANT Master
Tapping hole \varnothing guide value	4.65 mm
Thread \varnothing	5 mm

Thread pitch	0.8 mm
Number of clamping slots	5
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	no
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	38 m/min	N
Steel < 500 N/mm ²	suitable	37 m/min	P
Steel < 750 N/mm ²	suitable	35 m/min	P
Steel < 900 N/mm ²	suitable	27 m/min	P
Steel < 1100 N/mm ²	suitable	18 m/min	P
Steel < 1400 N/mm ²	suitable	12 m/min	P
INOX < 900 N/mm ²	suitable	12 m/min	M
INOX > 900 N/mm ²	suitable	7 m/min	M
CuZn	suitable	22 m/min	N

Oil	suitable
wet maximum	suitable
wet minimum	suitable