

Garant
Fluteless machine tap with oil grooves HSS-E-PM Form E 6HX, TiAlN, M: M3

Order data

Order number	139198 M3
GTIN	4062406383374
Item class	111

Description
Version:

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.**

DIN 2174 (\approx DIN 371 \leq M10; \approx DIN 376 \geq M12).

Tolerance class: ISO 2X/6HX.

Form E (lead-in 1.5 – 2 turns) **for deep threads with short run-out.** The thread is tapped almost to the bottom of the hole.

Tolerance class: ISO 2X 6HX

Thread pitch: 0.5 mm

Overall length L: 56 mm

Shank \varnothing D_s: 3.5 mm

Shank square □: 2.7 mm

Tapping hole \varnothing guide value: 2.8 mm

Technical description

Thread depth	9 mm
Series	GARANT Master
Tolerance class	ISO 2X 6HX
Number of cutting edges Z	4
Thread pitch	0.5 mm

Number of clamping slots	4
Thread size	M3
Tapping hole Ø guide value	2.8 mm
Thread Ø	2.5 mm
Overall length L	56 mm
Shank square □	2.7 mm
Shank Ø D _s	3.5 mm
Coating	TiAlN
Thread type	M
Flank angle	60°
Tool material	HSS E PM
Standard	DIN 2174
Thread standard	DIN 13
Taper lead form	E
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		