

Garant

GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAlN, UNC: 1/2-13



Order data

Order number	139485 1/2-13
GTIN	4062406707101
Item class	11I

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 3/8; \approx **DIN 376** \geq 7/16).

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

Application:

For UNC unified coarse threads ASME–B1.1.

Thread pitch: 1.954 mm

Threads per inch: 13

Thread \varnothing : 12.7 mm

Overall length L: 110 mm

Shank \varnothing D_s: 9 mm

Shank square \square : 7 mm

Technical description

Number of cutting edges Z	8
Shank square \square	7 mm
Thread pitch	1.954 mm
Overall length L	110 mm

Thread Ø	12.7 mm
Tapping hole Ø guide value	11.8 mm
Shank Ø D _s	9 mm
Number of clamping slots	8
Thread depth	36.21 mm
Threads per inch	13
Coating	TiAlN
Thread type	UNC
Flank angle	60 °
Tool material	HSS E PM
Standard	DIN 2174
Tolerance class	2BX
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
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		