

## Garant

### GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAlN, UNF: 5/8-18



#### Order data

Order number	139495 5/8-18
GTIN	4062406707231
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 UNF unified fine threads ASME–B1.1.**

Thread pitch: 1.411 mm

Threads per inch: 18

Thread  $\varnothing$ : 15.88 mm

Overall length L: 100 mm

Shank  $\varnothing$  D<sub>s</sub>: 12 mm

Shank square □: 9 mm

#### Technical description

Thread pitch	1.411 mm
Tapping hole $\varnothing$ guide value	15.2 mm
Thread depth	47.64 mm
Shank $\varnothing$ D <sub>s</sub>	12 mm

Number of clamping slots	8
Number of cutting edges Z	8
Thread Ø	15.88 mm
Overall length L	100 mm
Shank square □	9 mm
Threads per inch	18
Coating	TiAlN
Thread type	UNF
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 <sub>c</sub>	ISO code
Aluminium (short chipping)	suitable	38 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	37 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	35 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	27 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	18 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	12 m/min	P

INOX < 900 N/mm <sup>2</sup>	suitable	12 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	7 m/min	M
CuZn	suitable	22 m/min	N
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		