

**Garant**
**GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAlN, UNC: 3/8-16**

**Order data**

Order number	139485 3/8-16
GTIN	4062406707088
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  $\leq$  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.**

**Technical description**

Thread $\varnothing$	9.53 mm
Shank $\varnothing D_s$	10 mm
Tapping hole $\varnothing$ guide value	8.8 mm
Thread depth	28.59 mm
Shank square $\square$	8 mm
Number of cutting edges Z	6
Number of clamping slots	6
Thread pitch	1.588 mm

Overall length L	100 mm
Threads per inch	16
Coating	TiAlN
Thread type	UNC
Flank angle	60 degrees
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
Series	Master Form
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