Garant

GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAIN, UNC: 5/8-11



Order data

| Order number | 139485 5/8-11 |
|--------------|---------------|
| GTIN | 4062406707118 |
| 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 (≈ DIN 371 ≤ 3/8; **≈ DIN 376** ≥ 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: 2.309 mm Threads per inch: 11 Thread \emptyset : 15.88 mm Overall length L: 110 mm Shank \emptyset D_s: 12 mm Shank square \Box : 9 mm

Technical description

| Number of clamping slots | 8 |
|----------------------------|---------|
| Shank Ø D _s | 12 mm |
| Tapping hole Ø guide value | 14.8 mm |
| Shank square 🗆 | 9 mm |

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| Thread pitch | 2.309 mm | |
|----------------------------------|------------------------------------|--|
| Overall length L | 110 mm | |
| Thread Ø | 15.88 mm | |
| Thread depth | 47.64 mm | |
| Number of cutting edges Z | 8 | |
| Threads per inch | 11 | |
| Coating | TiAIN | |
| 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 $3 \times D$ 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 | Ν |
| Steel < 500 N/mm ² | suitable | 37 m/min | Р |
| Steel < 750 N/mm ² | suitable | 35 m/min | Р |
| Steel < 900 N/mm ² | suitable | 27 m/min | Р |
| Steel < 1100 N/mm ² | suitable | 18 m/min | Р |
| Steel < 1400 N/mm ² | suitable | 12 m/min | Р |

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| INOX < 900 N/mm ² | suitable | 12 m/min | М |
|------------------------------|----------|----------|---|
| INOX > 900 N/mm ² | suitable | 7 m/min | М |
| CuZn | suitable | 22 m/min | Ν |
| Oil | suitable | | |
| wet maximum | suitable | | |
| wet minimum | suitable | | |