

GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAIN, UNC: 4-40



Order data

| Order number | 139485 4-40 |
|--------------|---------------|
| GTIN | 4062406707019 |
| 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.

Thread pitch: 0.635 mm Threads per inch: 40 Thread \varnothing : 2.84 mm Overall length L: 56 mm Shank \varnothing D_s: 3.5 mm Shank square \square : 2.7 mm

Technical description

| Thread ∅ | 2.84 mm |
|----------------------------|----------|
| Thread pitch | 0.635 mm |
| Tapping hole Ø guide value | 2.55 mm |
| Number of clamping slots | 4 |

| Overall length L | 56 mm | | |
|----------------------------------|-----------------------------|--|--|
| Shank square □ | 2.7 mm | | |
| Number of cutting edges Z | 4 | | |
| Thread depth | 8.52 mm | | |
| Shank Ø D _s | 3.5 mm | | |
| Threads per inch | 40 | | |
| 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×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 | 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 |

| 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 | N |
| Oil | suitable | | |
| wet maximum | suitable | | |
| wet minimum | suitable | | |