Garant

# GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAlN, MF: 10X1

## Order data

| | |
|---|---|
| Order number | 139280 10X1 |
| GTIN | 4062406383862 |
| Item class | 11I |

## Description

**Version:**
**GARANT Master Form Steel:**
The latest generation of **high-performance fluteless taps** are specially developed for **use in steels.**
· **Optimised polygon geometry for a reduced torque.**
· **Multi-layer HIPIMS coating for high wear resistance.**
· **HSS-E-PM substrate for top process reliability.**
DIN 2174 (≈ DIN 371 ≤ M10; DIN 376≥ M12).
Tolerance class: ISO 2X 6HX
Thread pitch: 1 mm
Overall length L: 90 mm
Shank ⌀ $D_s$: 10 mm
Shank square ☐: 8 mm
Tapping hole ⌀ guide value: 9.55 mm

## Technical description

| | |
|---|---|
| Thread size | M10×1 |
| Number of clamping slots | 6 |
| Shank ⌀ $D_s$ | 10 mm |
| Thread pitch | 1 mm |
| Tolerance class | ISO 2X 6HX |

| | |
|---|---|
| Tapping hole ∅ guide value | 9.55 mm |
| Series | GARANT Master |
| Thread depth | 30 mm |
| Overall length L | 90 mm |
| Shank square ☐ | 8 mm |
| Number of cutting edges Z | 6 |
| Thread ∅ | 10 mm |
| Coating | TiAlN |
| Thread type | MF |
| Flank angle | 60 ° |
| Tool material | HSS E PM |
| Standard | DIN 2174 |
| Thread standard | DIN 13 |
| Taper lead form | C |
| 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 |
| Colour ring | without |
| Type of product | Fluteless tap |

## User data

| | Suitability | $V_c$ | ISO code |
|---|---|---|---|
| Aluminium (short chipping) | suitable only under restricted conditions | 38 m/min | N |
| Steel < 500 N/mm² | suitable | 37 m/min | P |
| Steel < 750 N/mm² | suitable | 35 m/min | P |
| Steel < 900 N/mm² | suitable | 27 m/min | P |

| | | | |
|---|---|---|---|
| Steel < 1100 N/mm² | suitable | 18 m/min | P |
| Steel < 1400 N/mm² | suitable | 12 m/min | P |
| INOX < 900 N/mm² | suitable | 12 m/min | M |
| INOX > 900 N/mm² | suitable only under restricted conditions | 7 m/min | M |
| CuZn | suitable only under restricted conditions | 22 m/min | N |
| Oil | suitable | | |
| wet maximum | suitable | | |
| wet minimum | suitable | | |