

Garant

GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAlN, MF: 16X1,5



Order data

| | |
|--------------|---------------|
| Order number | 139280 16X1,5 |
| GTIN | 4062406383909 |
| 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: 1.5 mm

Overall length L: 100 mm

Shank Ø D_s: 12 mm

Shank square □: 9 mm

Tapping hole Ø guide value: 15.35 mm

Technical description

| | |
|---------------------------|---------------|
| Number of cutting edges Z | 8 |
| Shank square □ | 9 mm |
| Shank Ø D _s | 12 mm |
| Thread size | M16×1.5 |
| Series | GARANT Master |

| | |
|----------------------------------|-----------------------------|
| Tapping hole Ø guide value | 15.35 mm |
| Tolerance class | ISO 2X 6HX |
| Number of clamping slots | 8 |
| Thread pitch | 1.5 mm |
| Overall length L | 100 mm |
| Thread Ø | 16 mm |
| Thread depth | 48 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/mm ² | suitable | 37 m/min | P |
| Steel < 750 N/mm ² | suitable | 35 m/min | P |
| Steel < 900 N/mm ² | suitable | 27 m/min | P |

| | | | |
|--------------------------------|---|----------|---|
| Steel < 1100 N/mm ² | suitable | 18 m/min | P |
| Steel < 1400 N/mm ² | suitable | 12 m/min | P |
| INOX < 900 N/mm ² | suitable | 12 m/min | M |
| INOX > 900 N/mm ² | 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 | | |