

Garant

GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAlN, G: G1/4



Order data

| | |
|--------------|---------------|
| Order number | 139415 G1/4 |
| GTIN | 4062406384005 |
| Item class | 11I |

Description

Version:

DIN 2189 (≈ DIN 5156). **With oil grooves; optimum lubrication effect even in deeper threads.**

GARANT Master Form Steel:

The latest generation of high-performance fluteless taps, specially developed for **use in steels.**

- **Optimised polygon geometry for a lower torque.**
- **Multi-layer HIPIMS coating for high wear resistance.**
- **HSS-E-PM substrate for top process reliability.**

Application:

For **Whitworth parallel pipe threads** DIN-ISO 228/1 (threads that do not form a seal within the connection).

Thread pitch: 1.337 mm

Threads per inch: 19

Thread Ø: 13.16 mm

Overall length L: 100 mm

Shank Ø D_s: 11 mm

Shank square □: 9 mm

Technical description

| | |
|----------------------------|----------|
| Overall length L | 100 mm |
| Thread pitch | 1.337 mm |
| Tapping hole Ø guide value | 12.55 mm |
| Number of cutting edges Z | 8 |

| | |
|----------------------------------|-----------------------------|
| Threads per inch | 19 |
| Shank $\varnothing D_s$ | 11 mm |
| Thread size | G1/4 |
| Thread depth | 39.48 mm |
| Number of clamping slots | 8 |
| Shank square \square | 9 mm |
| Thread \varnothing | 13.16 mm |
| Coating | TiAlN |
| Thread type | G |
| Flank angle | 55° |
| Tool material | HSS E PM |
| Standard | DIN 2189 |
| Tolerance class | ISO 228 X |
| 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 | blue |
| 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 | | |