

**Garant**
**Fluteless machine tap with oil grooves HSS-E-PM Form E 6HX, TiAlN, M: M12**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 139198 M12    |
| GTIN         | 4062406383442 |
| 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  $\leq$  M10;  $\approx$  DIN 376  $\geq$  M12).

**Tolerance class:** ISO 2X/6HX.

**Form E** (lead-in 1.5 – 2 turns) **for deep threads with short run-out.** The thread is tapped almost to the bottom of the hole.

Tolerance class: ISO 2X 6HX

Thread pitch: 1.75 mm

Overall length L: 110 mm

Shank  $\varnothing$  D<sub>s</sub>: 9 mm

Shank square □: 7 mm

Tapping hole  $\varnothing$  guide value: 11.2 mm

**Technical description**

|  |         |
|--|---------|
| Shank $\varnothing$ D <sub>s</sub>     | 9 mm    |
| Tapping hole $\varnothing$ guide value | 11.2 mm |
| Number of clamping slots               | 8       |
| Thread size                            | M12     |
| Thread $\varnothing$                   | 12 mm   |

|                                  |   |
|----------------------------------|---|
| Overall length L                 | 110 mm                                      |
| Thread pitch                     | 1.75 mm                                     |
| Thread depth                     | 36 mm                                       |
| Series                           | GARANT Master Steel                         |
| Tolerance class                  | ISO 2X 6HX                                  |
| Shank square □                   | 7 mm  |
| Number of cutting edges Z        | 8   |
| Coating                          | TiAlN                                       |
| Thread type                      | M   |
| Flank angle                      | 60 degrees                                  |
| Tool material                    | HSS E PM                                    |
| Standard                         | DIN 2174                                    |
| Thread standard                  | DIN 13                                      |
| Taper lead form                  | E   |
| Shank                            | Plain shank with h9                         |
| Through-coolant                  | no  |
| Application for type of drilling | up to 3×D for blind holes and through holes |
| Cutting direction                | right-hand                                  |
| Colour ring                      | without                                     |
| Type of product                  | Fluteless tap                               |