

**Garant**
**Fluteless machine tap with oil grooves HSS-E-PM, TiN, G: G1/4**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 139400 G1/4   |
| GTIN         | 4045197509611 |
| Item class   | 11H           |

**Description**
**Version:**

**DIN 2189** (≈ DIN 5156). **With oil grooves; optimum lubrication effect even in deeper threads.** The **innovative polygon form** permits a wide application spectrum. The **multi-function layer structure** achieves **maximum service life** even in **high-tensile materials**.

**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<sub>s</sub>: 11 mm

Shank square □: 9 mm

**Technical description**

|                           |          |
|---------------------------|----------|
| Thread pitch              | 1.337 mm |
| Threads per inch          | 19       |
| Number of cutting edges Z | 6        |
| Thread Ø                  | 13.16 mm |
| Number of clamping slots  | 6        |
| Shank Ø D <sub>s</sub>    | 11 mm    |
| Shank square □            | 9 mm     |

|                                  |                             |
|----------------------------------|-----------------------------|
| Overall length L                 | 100 mm                      |
| Tapping hole Ø guide value       | 12.55 mm                    |
| Thread depth                     | 39.48 mm                    |
| Thread size                      | G1/4                        |
| Coating                          | TiN                         |
| 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 <sub>c</sub> | ISO code |
|--------------------------------|---|----------------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 32 m/min       | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 27 m/min       | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 22 m/min       | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 17 m/min       | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 12 m/min       | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable                                  | 7 m/min        | M        |
| CuZn                           | suitable only under restricted conditions | 22 m/min       | N        |

|             |          |
|-------------|----------|
| Oil         | suitable |
| wet maximum | suitable |