

## Fluteless machine tap with oil grooves HSS-E-PM IC, TiAIN, G: G3/8



### **Order data**

| Order number | 139425 G3/8   |
|--------------|---------------|
| GTIN         | 4062406384043 |
| Item class   | 111           |

## **Description**

#### **Version:**

DIN 2189 ( $\approx$  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.

With internal coolant feed laterally from the grooves. Permits the longest possible tool life when machining through holes and blind holes.

#### **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  $\varnothing$ : 16.66 mm Overall length L: 100 mm Shank  $\varnothing$  D<sub>s</sub>: 12 mm Shank square  $\square$ : 9 mm

## **Technical description**

| Number of cutting edges Z  | 8        |
|----------------------------|----------|
| Tapping hole Ø guide value | 16.05 mm |
| Thread Ø                   | 16.66 mm |
| Number of clamping slots   | 8        |

| Thread pitch                     | 1.337 mm                    |  |  |
|----------------------------------|-----------------------------|--|--|
| Shank square □                   | 9 mm                        |  |  |
| Shank Ø D <sub>s</sub>           | 12 mm                       |  |  |
| Thread depth                     | 49.98 mm                    |  |  |
| Threads per inch                 | 19                          |  |  |
| Thread size                      | G3/8                        |  |  |
| Overall length L                 | 100 mm                      |  |  |
| Coating                          | TiAIN                       |  |  |
| Thread type                      | G                           |  |  |
| Flank angle                      | 55 °                        |  |  |
| Tool material                    | HSS E PM                    |  |  |
| Standard                         | DIN 2189                    |  |  |
| Tolerance class                  | ISO 228 X                   |  |  |
| Taper lead form                  | С                           |  |  |
| Shank                            | Plain shank with h9         |  |  |
| Through-coolant                  | yes                         |  |  |
| 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                               | $\mathbf{V}_{c}$ | ISO code |
|-------------------------------|---|------------------|----------|
| Aluminium (short chipping)    | suitable only under restricted conditions | 42 m/min         | N        |
| Steel < 500 N/mm <sup>2</sup> | suitable                                  | 40 m/min         | Р        |
| Steel < 750 N/mm <sup>2</sup> | suitable                                  | 38 m/min         | Р        |
| Steel < 900 N/mm <sup>2</sup> | suitable                                  | 29 m/min         | Р        |

| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 20 m/min | Р |
|--------------------------------|---|----------|---|
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 15 m/min | Р |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 15 m/min | M |
| INOX > 900 N/mm <sup>2</sup>   | suitable only under restricted conditions | 8 m/min  | М |
| CuZn                           | suitable only under restricted conditions | 25 m/min | N |
| Oil                            | suitable                                  |          |   |
| wet maximum                    | suitable                                  |          |   |
| wet minimum                    | suitable                                  |          |   |