

**Garant**
**GARANT Master Tap machine tap HSS-E-PM 6GX, AlTiX, MF: 12X1**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 137161 12X1   |
| GTIN         | 4067263108405 |
| Item class   | 11I           |

**Description**
**Version:**

**GARANT Master Tap Universal taps**, designed for use in a wide spectrum of materials with high process reliability.

- **HSS-E-PM tool material for maximum wear resistance.**
- **Reduced coefficient of friction due to the new high-performance coating.**
- **Special geometry for optimum swarf evacuation.**

**Tolerance class: ISO 3X/6GX.** For components which are **galvanised** or shrink slightly when hardened.

**Technical description**

|                            |            |
|----------------------------|------------|
| Number of cutting edges Z  | 3          |
| Tool material              | HSS E PM   |
| Shank $\varnothing D_s$    | 9 mm       |
| Shank square $\square$     | 7 mm       |
| Tolerance class            | ISO 3X 6GX |
| Thread size                | M12x1      |
| Thread type                | MF         |
| Tapping hole $\varnothing$ | 11 mm      |
| Number of clamping slots   | 3          |
| Thread depth               | 30 mm      |
| Standard                   | DIN 374    |

|                                  |                                   |
|----------------------------------|-----------------------------------|
| Thread Ø                         | 12 mm                             |
| Thread pitch                     | 1 mm                              |
| Overall length L                 | 100 mm                            |
| Coating                          | AlTiX                             |
| Flank angle                      | 60 degrees                        |
| Thread standard                  | DIN 13                            |
| Taper lead form                  | C                                 |
| Helix angle                      | 40 degrees                        |
| Shank                            | Plain shank with h9               |
| Through-coolant                  | no                                |
| Application for type of drilling | up to 2.5×D for blind holes       |
| Cutting direction                | right-hand                        |
| Type of threading tool           | Machine tap for dynamic machining |
| Colour ring                      | green                             |
| Series                           | Master Tap                        |
| Type of product                  | Tap                               |

## User data

|                                | Suitability | V <sub>c</sub> | ISO code |
|--------------------------------|-------------|----------------|----------|
| Alu plastics                   | suitable    | 30 m/min       | N        |
| Aluminium (short chipping)     | suitable    | 35 m/min       | N        |
| Alu > 10% Si                   | suitable    | 20 m/min       | N        |
| Steel < 500 N/mm <sup>2</sup>  | suitable    | 30 m/min       | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable    | 30 m/min       | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable    | 25 m/min       | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable    | 121 m/min      | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable    | 8 m/min        | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable    | 10 m/min       | M        |

|                              |          |          |   |
|------------------------------|----------|----------|---|
| INOX > 900 N/mm <sup>2</sup> | suitable | 8 m/min  | M |
| GG(G)                        | suitable | 20 m/min | K |
| CuZn                         | suitable | 20 m/min | N |
| Uni                          | suitable |          |   |
| Oil                          | suitable |          |   |
| wet maximum                  | suitable |          |   |