

Garant
Machine tap for synchronised spindles HSS-E-PM Form E, TiAlN, M: M3

Order data

| | |
|--------------|---------------|
| Order number | 136173 M3 |
| GTIN | 4045197508362 |
| Item class | 11H |

Description
Version:
Sturdy design with right-hand chip flutes and shank to DIN 1835-B.

Special geometry for **universal applications** on machines with **synchronised spindle drive**. The tap is guided by the synchronised spindle on the machine. Special **TiAlN-S coating** for optimum tool life.

For use with **emulsion** (fat content minimum 8%).

Form E (lead chamfer: 1.5 - 2 turns) for the deepest possible thread depths.

Note:

For use on synchronised spindles, the **GARANT** quick-change tapping chuck **No. 338100 – 338121 with minimum length adjustment (MLA)** ensures very high process reliability.

Thread type: M

Tool material: HSS E PM

Standard: Manufacturer's standard

Tolerance class: ISO 2X 6HX

Thread pitch: 0.5 mm

Overall length L: 70 mm

Shank $\varnothing D_s$: 6 mm

Shank square \square : 4.9 mm

Tapping hole \varnothing : 2.5 mm

Technical description

| | |
|----------------------------|--------|
| Tapping hole \varnothing | 2.5 mm |
| Number of clamping slots | 3 |
| Thread \varnothing | 3 mm |
| Number of cutting edges Z | 3 |

| | |
|----------------------------------|---------------------------------------|
| Thread pitch | 0.5 mm |
| Standard | Manufacturer's standard |
| Shank $\varnothing D_s$ | 6 mm |
| Overall length L | 70 mm |
| Shank square \square | 4.9 mm |
| Tolerance class | ISO 2X 6HX |
| Tool material | HSS E PM |
| Thread depth | 9 mm |
| Thread type | M |
| Thread size | M3 |
| Coating | TiAlN |
| Flank angle | 60° |
| Thread standard | DIN 13 |
| Taper lead form | E |
| Helix angle | 40° |
| Shank | DIN 1835 B to h6 |
| Through-coolant | no |
| Application for type of drilling | up to 3×D for blind holes |
| Cutting direction | right-hand |
| Shank tolerance | h6 |
| Type of threading tool | Machine tap for synchronous machining |
| Colour ring | green |
| Type of product | Tap |

User data

| | Suitability | V_c | ISO code |
|--------------|---|----------|----------|
| Alu plastics | suitable only under restricted conditions | 32 m/min | N |

| | | | |
|--------------------------------|---|----------|---|
| Aluminium (short chipping) | suitable | 32 m/min | N |
| Steel < 500 N/mm ² | suitable | 33 m/min | P |
| Steel < 750 N/mm ² | suitable | 32 m/min | P |
| Steel < 900 N/mm ² | suitable | 20 m/min | P |
| Steel < 1100 N/mm ² | suitable | 12 m/min | P |
| Steel < 1400 N/mm ² | suitable | 7 m/min | P |
| INOX < 900 N/mm ² | suitable | 11 m/min | M |
| INOX > 900 N/mm ² | suitable | 9 m/min | M |
| CuZn | suitable only under restricted conditions | 30 m/min | N |
| Uni | suitable | | |
| Oil | suitable | | |
| wet maximum | suitable | | |
| wet minimum | suitable | | |