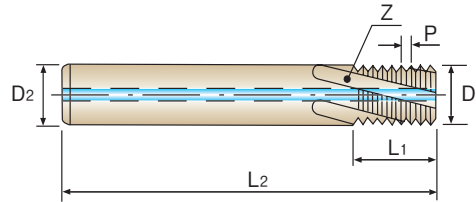


# M Solid Carbide Thread Mill with Coolant Hole for ISO Metric Internal Thread - DIN 13

## VOLLHARTMETALL GEWINDEFÄSER mit KÜHLKANAL für ISO METRISCHES INNENGEWINDE - DIN 13

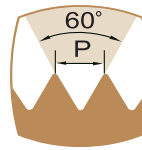
► Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.

► Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



- Material : Solid Carbide
- Shank : DIN6535 HA
- Spiral Angle : 15°
- Thread Length : 2 × D

- Material : Vollhartmetall
- Schaft : DIN 6535 HA
- Drallwinkel : 15°
- Gewindelänge : 2 × D



Unit : mm

EDP No.	Nominal Diameter [ D ]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Over All Length	No. of Flute
TiAlN		P	D1	D2	L1	L2	Z
<b>L4211310</b>	M6	1.0	<b>4.5</b>	6	13.0	57	3
<b>L4211360</b>	M8	1.25	<b>6.0</b>	6	17.5	65	3
<b>L4211420</b>	M10	1.5	<b>7.5</b>	8	21.0	72	4
<b>L4211500</b>	M12	1.75	<b>9.5</b>	10	26.25	80	4
<b>L4211540</b>	M14	2.0	<b>10.0</b>	10	30.0	83	4
<b>L4211600</b>	M16	2.0	<b>12.0</b>	12	34.0	92	4
<b>L4211700</b>	M20	2.5	<b>16.0</b>	16	42.5	105	5

\* Other coatings are available on your request

◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steel	Cast Iron	Stainless Steels	Titanium Alloy	Chrome-Nickel Alloy	Non Ferrous Materials
◎	◎	◎		◎	○	○	○	◎

**RECOMMENDED CUTTING SPEED**  
**EMPFOHLENE SCHNEIDKONDITIONEN**
**RECOMMENDED CUTTING CONDITION for Thread Mills**

unit : mm

Materials	Cutting Speed (m/min)	Feed per Tooth (fz)	
		Cutter Diameter $\leq \varnothing 8.0$	Cutter Diameter $> \varnothing 8.0$
Low Carbon Steels Medium Carbon Steels	80 - 120	0.02 - 0.04	0.04 - 0.10
High Carbon Steels	80 - 120	0.02 - 0.04	0.04 - 0.10
Alloy Steels	80 - 120	0.02 - 0.04	0.04 - 0.10
Heat Treated Steels	60 - 100	0.02 - 0.04	0.04 - 0.10
Stainless Steels	40 - 80	0.01 - 0.02	0.02 - 0.06
Cast Iron	50 - 100	0.02 - 0.04	0.04 - 0.10
Chrome-Nickel Alloys Titanium Alloys	20 - 60	0.01 - 0.02	0.02 - 0.06
Non Ferrous Materials	100 - 300	0.03 - 0.07	0.05 - 0.10

**RECOMMENDED CUTTING CONDITION for Drill and Thread Mills**

unit : mm

Material	Cutting Speed (m/min)	Fz(Threading) - Feed per tooth		Fdr(Drilling) - Feed per revolution	
		Cutter Diameter $\leq \varnothing 8.0$	Cutter Diameter $> \varnothing 8.0$	Cutter Diameter $\leq \varnothing 8.0$	Cutter Diameter $> \varnothing 8.0$
Cast Iron	80-150	0.03-0.08	0.08-0.12	0.10-0.20	0.20-0.25
Aluminium Aluminium-alloy Magnesium	100-300	0.05-0.10	0.10-0.15	0.10-0.20	0.20-0.30
Plastics	80-150	0.05-0.10	0.10-0.15	0.10-0.20	0.20-0.30

**RECOMMENDED CUTTING CONDITION for Hard Material Miniature Thread Mills**

unit : mm

Materials	Cutting Speed (m/min)	Feed(mm/tooth)	
		Cutter Diameter $\leq \varnothing 6.0$	Cutter Diameter $> \varnothing 6.0$
Alloy Steel $\geq \text{HB325}$	80-120	0.02-0.04	0.04-0.06
Stainless Steel $\geq \text{HB330}$	40-80	0.02-0.04	0.04-0.06
Cast Iron	50-100	0.03-0.05	0.05-0.07
Chrome-Nickel Alloys Titanium Alloys	20-60	0.02-0.03	0.03-0.05
Hardened Material	45~50HRc	25-70	0.03-0.05
	51~55HRc	25-60	0.02-0.04
	56~62HRc	25-50	0.01-0.03