

Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓ	ℓn	ℓs	Ds	K	ℓk

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① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

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④-121

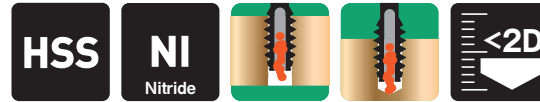


PL2

Hand Taps for Thermoplastic Resins



Specification



Tapping Speeds depending on Materials

Thermosetting plastic 熱硬化性プラスチック	Thermoplastic resin 熱可塑性プラスチック
~5 (m/min)	~5 (m/min)

Product Features

- Among synthetic resins, the properties of thermoplastic resin make it easy to deform and extend even at a comparatively low temperature. Therefore, after tapping, internal threads may shrink or make chips remain in internal threads on the far side in small burr shape which are often difficult to remove. For PL2, the internal thread accuracy is stabilized by making the tap class oversize, and the remaining chip problem is solved by optimizing the flute shape.
- Applicable workpiece materials are thermoplastic resins: ABS, POM, PC, PVC, HDPE (high-density polyethylene), etc.

Measures against Chips Remaining in Internal Threads on Far Side



Tapping with HT



Tapping with PL2

Chips are removed and nothing remains.

Product Chart

			Slow → Tapping Speed → Fast	
Examples of workpiece materials			5m/min	10m/min
Thermosetting	Phenolic resin	PF	<div>PL1 (For plastics)</div>	
	Urea resin	UF		
	Melamine resin	MF		
	Epoxy resin (for casting)	EP		
	Unsaturated polyester (hard for casting)	UP		
Thermoplastic	Engineering plastics	POM	<div>PL2 (For thermoplastic resins)</div>	
	Engineering plastics	PC		
	Commodity plastics	ABS		
	Commodity plastics	PVC		
	Commodity plastics	High-density polyethylene		

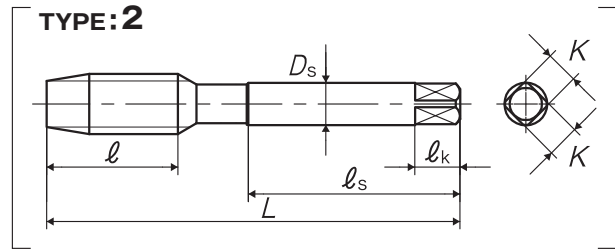
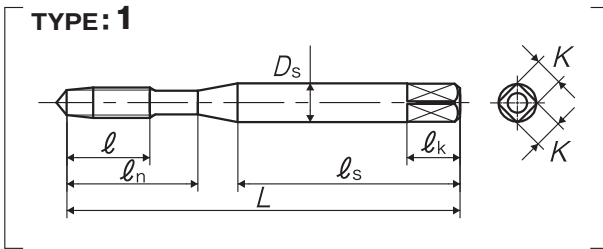
5m/min

10m/min

Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓ	ℓ _n	ℓ _s	D _s	K	ℓ _k

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Segment : 1A

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M2 × 0.4	P4	TY2.0ESMEN3	3P	42	7.2	12	27	3	2.5	5	3	1	¥ 2,930 [※]
M2.3 × 0.4	P4	TY2.3ESMEN3	3P	42	7.2	12	27	3	2.5	5	3	1	¥ 2,660 [※]
M2.5 × 0.45	P4	TY2.5FSMEN3	3P	46	8.1	14	29	3	2.5	5	3	1	¥ 2,250
M2.6 × 0.45	P4	TY2.6FSMEN3	3P	46	8.1	14	29	3	2.5	5	3	1	¥ 2,250 [※]
M3 × 0.5	P5	TY3.0GTMEN3	3P	46	9	14	26	4	3.2	6	4	1	¥ 1,580
M3.5 × 0.6	P5	TY3.5HTMEN3	3P	52	11	16	29	5	4	7	4	1	¥ 1,580
M4 × 0.7	P5	TY4.0ITMEN3	3P	52	11	17	29	5	4	7	4	1	¥ 1,580
M5 × 0.8	P5	TY5.0KTMEN3	3P	60	13	22	33	5.5	4.5	7	4	1	¥ 1,590
M6 × 1	P5	TY6.0MTMEN3	3P	62	15	26	33	6	4.5	7	4	1	¥ 1,750 [※]
M8 × 1.25	P6	TY8.0NUMEN3	3P	70	19	-	36	6.2	5	8	4	2	¥ 2,390 [※]

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(for blind hole)

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Special Thread Taps
Simple Inspection Tools

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Pipe Taps

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Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

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