

4 Hand Tap Series

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

JIS

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

JIS

④-119

PL1

Hand Taps for Thermosetting



Specification



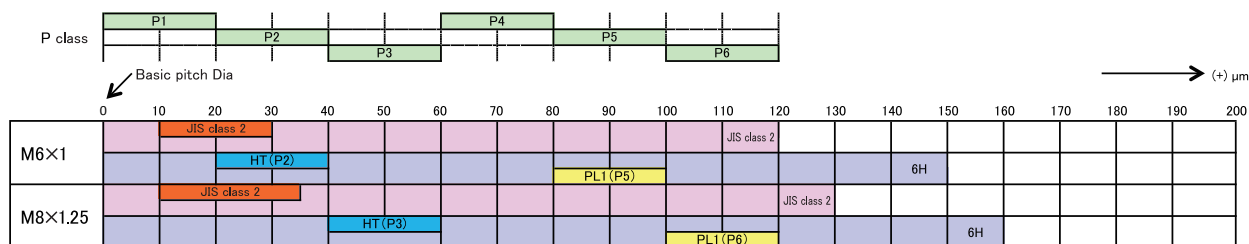
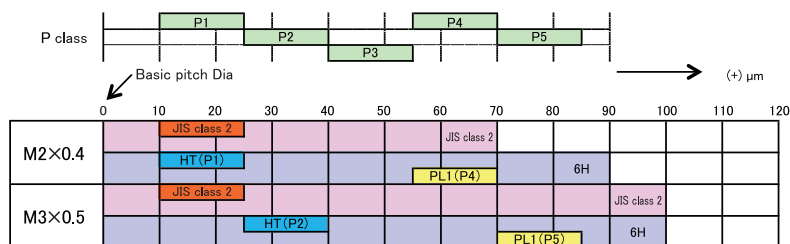
Tapping Speeds depending on Materials

Thermosetting plastic
熱硬化性プラスチック
5~10
(m/min)

Product Features

- The PL1 is a tap for threading thermosetting resin that is exceptionally difficult to machine among the synthetic resin. These plastics have low thermal conductivity and concentrate the heat at the cutting edge. Tool abrasion is severe. The material tends to shrink when cutting an internal thread. The PL1 tap is designed to cut slightly oversize to allow for the shrinkage. A nitriding treatment is applied for better tool life.

Comparison of accuracy between a HT and a PL1



Product Chart

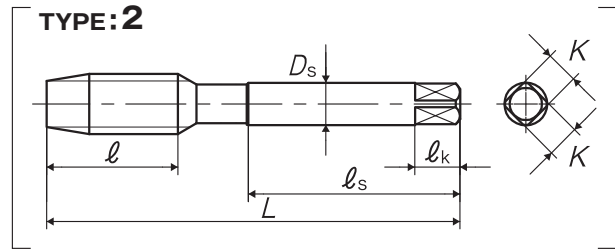
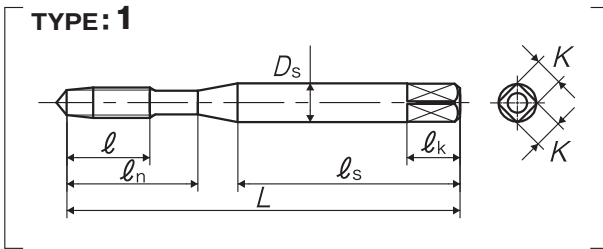
			Slow	Tapping Speed	Fast
Examples of workpiece materials			5m/min	10m/min	
Thermosetting	Phenolic resin	PF	<div>PL1 (For plastics)</div>		
	Urea resin	UF			
	Melamine resin	MF			
	Epoxy resin (for casting)	EP			
	Unsaturated polyester (hard for casting)	UP			
Thermoplastic	Engineering plastics	Polyacetal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

Think threads with
YAMAWA

Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓ	ℓ_n	ℓ_s	Ds	K	ℓ_k

4

JIS



Segment : 1A

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M2 × 0.4	P4	TPLM2.0E3	3P	42	7.2	12	27	3	2.5	5	3	1	¥ 2,790 [※]
M2.3 × 0.4	P4	TPLM2.3E3	3P	42	7.2	12	27	3	2.5	5	3	1	¥ 2,530 [※]
M2.5 × 0.45	P4	TPLM2.5F3	3P	46	8.1	14	29	3	2.5	5	3	1	¥ 2,140
M2.6 × 0.45	P4	TPLM2.6F3	3P	46	8.1	14	29	3	2.5	5	3	1	¥ 2,140 [※]
M3 × 0.5	P5	TPLM3.0G3	3P	46	9	14	26	4	3.2	6	4	1	¥ 1,500
M3.5 × 0.6	P5	TPLM3.5H3	3P	52	11	16	29	5	4	7	4	1	¥ 1,500
M4 × 0.7	P5	TPLM4.0I3	3P	52	11	17	29	5	4	7	4	1	¥ 1,500
M5 × 0.8	P5	TPLM5.0K3	3P	60	13	22	33	5.5	4.5	7	4	1	¥ 1,510
M6 × 1	P5	TPLM6.0M3	3P	62	15	26	33	6	4.5	7	4	1	¥ 1,660 [※]
M8 × 1.25	P6	TPLM8.0N3	3P	70	19	-	36	6.2	5	8	4	2	¥ 2,270 [※]

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⑫

JIS

④-120