

## PM-SP

### Spiral Fluted Taps for Hard-to-Machine Materials

Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓ	ℓ <sub>n</sub>	ℓ <sub>s</sub>	D <sub>s</sub>	K	ℓ <sub>k</sub>



#### Specification

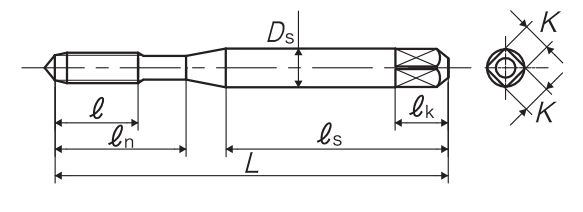


■ Spiral fluted tap suitable for tapping hard steels with hardness between 25-45HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and mold steels.

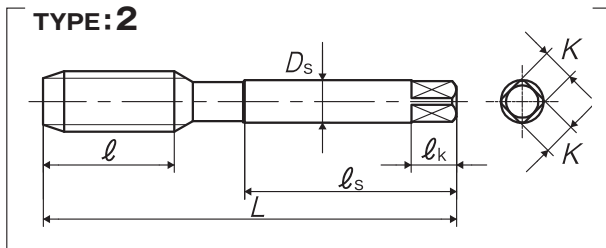
#### Tapping Speeds depending on Materials

High carbon steels 高炭素鋼	Thermal refined steels 調質鋼	Thermal refined steels 調質鋼
<b>5~10</b> (m/min)	<b>~5</b> (m/min)	<b>~5</b> (m/min)
	25~35HRC	35~45HRC

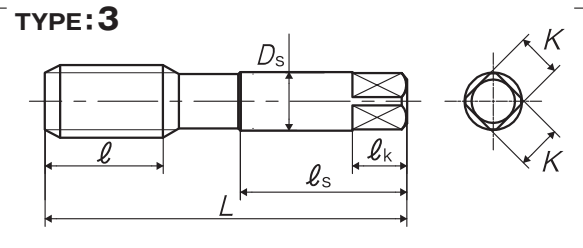
#### TYPE: 1



#### TYPE: 2



#### TYPE: 3



Segment : 1D

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ <sub>n</sub> (mm)	ℓ <sub>s</sub> (mm)	D <sub>s</sub> (mm)	K (mm)	ℓ <sub>k</sub> (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M3 × 0.5	P3	SY3.0GRDPB	2.75P	46	9	14	26	4	3.2	6	3	1	¥ 1,770*
M4 × 0.7	P3	SY4.0IRDPB	2.75P	52	11	17	29	5	4	7	3	1	¥ 1,770*
M5 × 0.8	P3	SY5.0KRDPB	2.75P	60	13	22	33	5.5	4.5	7	3	1	¥ 1,780*
M6 × 1	P3	SY6.0MRDPB	2.75P	62	15	26	33	6	4.5	7	3	1	¥ 1,960*
M8 × 1.25	P3	SY8.0NRDPB	2.75P	70	19	-	36	6.2	5	8	3	2	¥ 2,690*
M10 × 1.5	P3	SY010ORDPB	2.75P	75	23	-	38	7	5.5	8	3	2	¥ 3,420*
M10 × 1.25	P3	SY010NRDPB	2.75P	75	23	-	38	7	5.5	8	3	2	¥ 3,420*
M12 × 1.75	P3	SY012PRDPB	2.75P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,850*
M12 × 1.5	P3	SY012ORDPB	2.75P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,850*
M12 × 1.25	P4	SY012NSDPB	2.75P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,850*
M14 × 2	P4	SY014QSDPB	2.75P	88	26	-	45	10.5	8	11	3	2	¥ 6,610*
M14 × 1.5	P3	SY014ORDPB	2.75P	88	26	-	45	10.5	8	11	3	2	¥ 6,610*
M16 × 2	P4	SY016QSDPB	2.75P	95	26	-	48	12.5	10	13	3	2	¥ 8,840*
M16 × 1.5	P3	SY016ORDPB	2.75P	95	26	-	48	12.5	10	13	3	2	¥ 8,840*
M18 × 2.5	P4	SY018RSDPB	2.75P	100	33	-	51	14	11	14	4	2	¥ 11,900*
M18 × 1.5	P4	SY018OSDPB	2.75P	100	33	-	51	14	11	14	4	2	¥ 11,900*

\* = Specified Distribution Items. Made to order products.

# 1 Spiral Fluted Tap Series for blind hole

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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## PM-SP Spiral Fluted Taps for Nickel Base Alloys

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M20 × 2.5	P4	SY020RSDPB	2.75P	105	33	-	50	15	12	15	4	3	¥ 16,100 <sup>**</sup>
M20 × 1.5	P4	SY020OSDPB	2.75P	105	33	-	50	15	12	15	4	3	¥ 16,100 <sup>**</sup>
M22 × 2.5	P4	SY022RSDPB	2.75P	115	33	-	55	17	13	16	4	3	¥ 20,600 <sup>**</sup>
M22 × 1.5	P4	SY022OSDPB	2.75P	115	33	-	55	17	13	16	4	3	¥ 20,600 <sup>**</sup>
M24 × 3	P4	SY024SSDPB	2.75P	120	39	-	55	19	15	18	4	3	¥ 25,700 <sup>**</sup>
M24 × 1.5	P4	SY024OSDPB	2.75P	120	39	-	55	19	15	18	4	3	¥ 25,700 <sup>**</sup>
M27 × 3	P4	SY027SSDPB	2.75P	130	39	-	60	20	15	18	4	3	¥ 35,700 <sup>**</sup>
M27 × 1.5	P4	SY027OSDPB	2.75P	130	39	-	60	20	15	18	4	3	¥ 35,700 <sup>**</sup>
M30 × 3.5	P4	SY030TSDPB	2.75P	135	46	-	62	23	17	20	4	3	¥ 45,500 <sup>**</sup>
M30 × 1.5	P4	SY030OSDPB	2.75P	135	46	-	62	23	17	20	4	3	¥ 45,500 <sup>**</sup>
For Unified Threads													
5/16-18UNC	P3	SYU05ORDPB	2.75P	70	19	-	36	6.2	5	8	3	2	¥ 3,100 <sup>**</sup>
5/16-24UNF	P3	SYU05MRDPB	2.75P	70	19	-	36	6.2	5	8	3	2	¥ 3,100 <sup>**</sup>
3/8-16UNC	P3	SYU06PRDPB	2.75P	75	23	-	38	7	5.5	8	3	2	¥ 3,970 <sup>**</sup>
3/8-24UNF	P3	SYU06MRDPB	2.75P	75	23	-	38	7	5.5	8	3	2	¥ 3,970 <sup>**</sup>
7/16-14UNC	P4	SYU07QSDPB	2.75P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,590 <sup>**</sup>
7/16-20UNF	P3	SYU07NRDPB	2.75P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,590 <sup>**</sup>
1/2-13UNC	P4	SYU08RSDPB	2.75P	88	26	-	45	10.5	8	11	3	2	¥ 5,930 <sup>**</sup>
1/2-20UNF	P3	SYU08NRDPB	2.75P	88	26	-	45	10.5	8	11	3	2	¥ 5,930 <sup>**</sup>
5/8-11UNC	P4	SYU10USDPB	2.75P	95	26	-	48	12.5	10	13	3	2	¥ 8,840 <sup>**</sup>
5/8-18UNF	P3	SYU10ORDPB	2.75P	95	26	-	48	12.5	10	13	3	2	¥ 8,840 <sup>**</sup>
3/4-10UNC	P4	SYU12VSDPB	2.75P	105	33	-	50	15	12	15	3	3	¥ 16,100 <sup>**</sup>
3/4-16UNF	P4	SYU12PSDPB	2.75P	105	33	-	50	15	12	15	3	3	¥ 16,100 <sup>**</sup>
1 -8UNC	P5	SYU16XTDPB	2.75P	125	39	-	58	19	15	18	3	3	¥ 33,200 <sup>**</sup>
1 -12UNF	P4	SYU16SSDPB	2.75P	125	39	-	58	19	15	18	3	3	¥ 33,200 <sup>**</sup>

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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\* = Specified Distribution Items. Made to order products.