

SPIRAL POINTED TAP SERIES



IPO	P0-1	SU+PO/SU-PO	P0-23
P0	P0-3	LS-SU-S-PO	P0-26
+PO	P0-10	S-PO	P0-27
P0 OX	P0-11	HC+PO/HC-PO	P0-29
+PO OX	P0-13	AL-PO	P0-31
P0 LH	P0-14	MC-PO	P0-32
P0 V	P0-16	EH-PO	P0-33
LS-PO	P0-17	ZEN-P	P0-34
LS-PO V	P0-21	PM-PO	P0-35
LS-PO-K	P0-22	LS-PM-PO	P0-36

Spiral Fluted Taps (for blind hole)
 Spiral Fluted Taps (for through hole)
 Spiral Pointed Taps (for through hole)
 Hand Taps
 Cemented Carbide Taps
 Roll Taps
 Special Thread Taps (Simple inspection tools)
 Pipe Taps
 Thread Mills
 Dies
 Center Drills
 Centering Tools

IPO

Spiral Pointed Taps for General Purpose Specification



Recommended Tapping Speeds depending on Materials



For icon explanation, refer to P.24

Product features

- IPO is the best tap for through holes to be used with lower cutting speed on drilling machines.
- Use for threading of the iron (SPC or SS400) products used in our daily life.
- Surface treated. Oxidization, the most suitable surface treatment for iron products.
- Suitable for internal thread cutting in small quantity, such as tapping of test pieces.
- Having spiral points in the chamfer portion, IPO ejects chips forward in the tapping direction and is for through hole use.



Tapping for through holes

How to use IPO

- Start tapping after boring holes corresponding to the thread size by using drills.
- In the case of tapping with drilling machines, recommended tapping speed is slower than 5m/min.
- During tapping, please use tapping oil.



When hand tapping, always use tap wrench



Machine tapping with drilling machine

Table for bored and drilled hole sizes

unit: mm

Size	Minor diameter of internal thread size			Drill size	Thread engagement
	Minimum tolerance	Maximum tolerance			
		6H (2nd class)	7H (3rd class)		
M3 × 0.5	2.459	2.599	2.639	2.6 (2.5)	74% (92%)
M4 × 0.7	3.242	3.422	3.466	3.4 (3.3)	79% (92%)
M5 × 0.8	4.134	4.344	4.384	4.3 (4.2)	81% (92%)
M6 × 1	4.917	5.153	5.217	5.1 (5.0)	83% (92%)
M8 × 1.25	6.647	6.912	6.982	6.9 (6.8)	91% (89%)
M10 × 1.5	8.376	8.676	8.751	8.6 (8.5)	86% (92%)

note1) Recommended drill sizes shown in this table are for internal threads of 7H class (3rd class), and are selected from the standard drills available in the market.

note2) Drill sizes shown in brackets in this table are for such case as the drilling has oversize cutting tendency or for internal threads of 6H class (2nd class).

[Related products]

Shank adjuster

- For deep hole tappings, please use shank adjusters.
- There is only a one touch motion required to detach and attach the I series taps (IHT/ISP/IPO) from or to the shank adjuster.

*For details of shank adjuster, refer to P.296



Blister Pack



Detailed explanation about tapping

Spiral Pointed Taps
Material: HSS

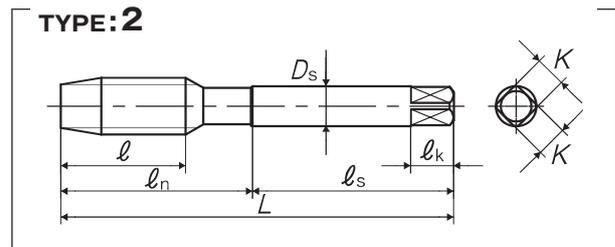
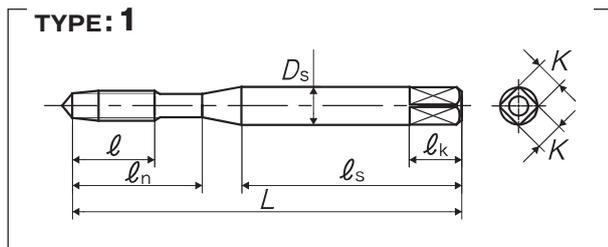
M10×1.5 UNC Chamfer: EP
(ANSI Dimension)
Tap drill size 8.5mm(ref.)

A suitable surface oxide treatment is applied for soft steel.

[REMARKS]
● THIS TAP IS NOT RECOMMENDED FOR HARD TO MACHINE MATERIALS LIKE HARDENED STEELS OR STAINLESS STEELS.
● HSS TAPS MAY SHATTER DURING USE, APPLY MACHINE COVERS AND WEAR SAFETY GLASSES WHEN USING TAPS FOR CUTTING THREADS.
WHEN SETTING TOOLS AND WORKPIECES, SECURE TIGHTLY TO AVOID VIBRATION AND RUNOUT.
DO NOT USE EXCESSIVE FORCE OR LOAD AS IT MAY CAUSE THE TAP BREAK.
YAMAWA MFG. CO., LTD.
WEBSITE URL:
<http://www.yamawa.com/en/>



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



Segment : 1E

Size	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
For Metric Threads												
M3 × 0.5	PI73.0G	5P	46	9	14	26	4	3.2	6	3	1	◎
M4 × 0.7	PI74.0I	5P	52	11	17	29	5	4	7	3	1	◎
M5 × 0.8	PI75.0K	5P	60	13	22	33	5.5	4.5	7	3	1	◎
M6 × 1	PI76.0M	5P	62	15	26	33	6	4.5	7	3	1	◎
M8 × 1.25	PI78.0N	5P	70	19	-	36	6.2	5	8	3	2	◎
M10 × 1.5	PI70100	5P	75	23	-	38	7	5.5	8	3	2	◎

Blister Pack

Size	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
For Metric Threads												
M3 × 0.5	PI73.0GBP	5P	46	9	14	26	4	3.2	6	3	1	◎
M4 × 0.7	PI74.0IBP	5P	52	11	17	29	5	4	7	3	1	◎
M5 × 0.8	PI75.0KBP	5P	60	13	22	33	5.5	4.5	7	3	1	◎
M6 × 1	PI76.0MBP	5P	62	15	26	33	6	4.5	7	3	1	◎
M8 × 1.25	PI78.0NBP	5P	70	19	-	36	6.2	5	8	3	2	◎
M10 × 1.5	PI70100BP	5P	75	23	-	38	7	5.5	8	3	2	◎

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PO

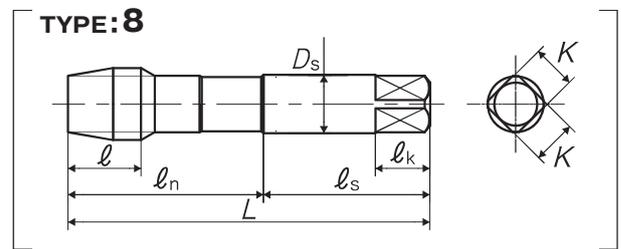
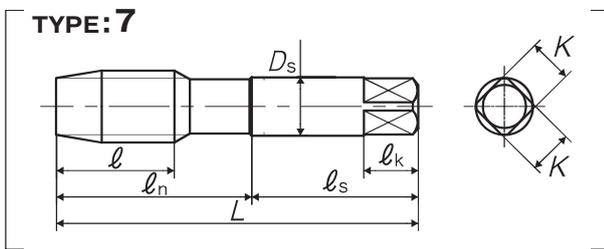
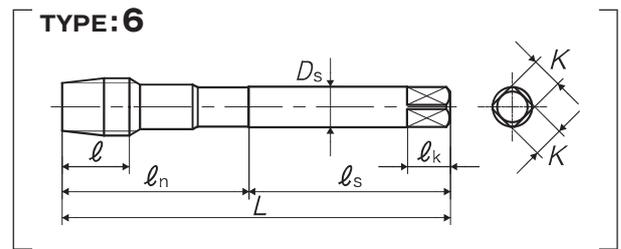
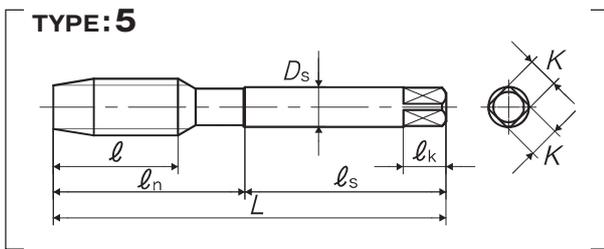
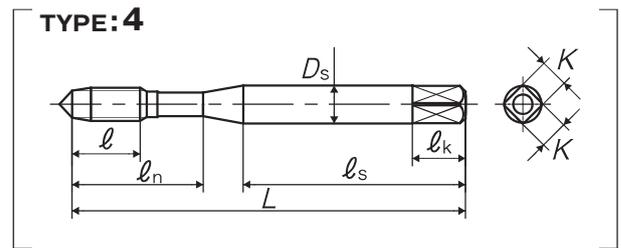
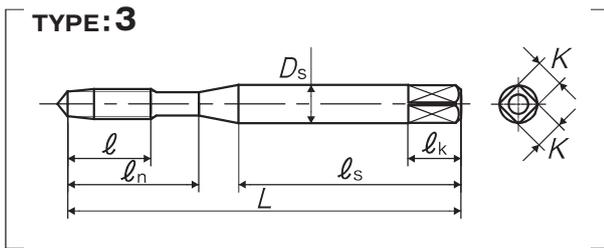
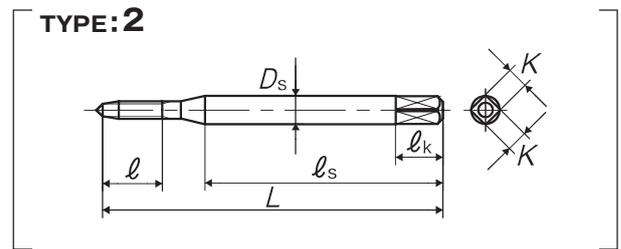
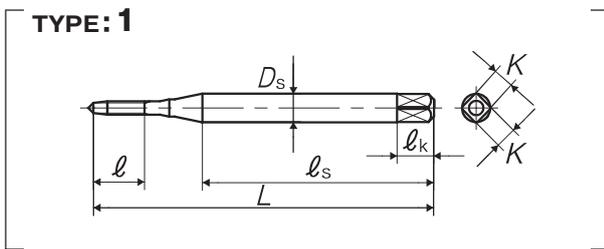
Spiral Pointed Taps Specification



Recommended Tapping Speeds depending on Materials

Medium carbon steels
中炭素鋼
5~10
(m/min)

For icon explanation, refer to P.24



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

PO Spiral Pointed Taps

 Oversize
 Segment : 1E

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
For Metric Threads													
M1.2 × 0.25	P1	POP1.2B	5P	36	4.5	-	24	3	2.5	5	2	1	○
M1.4 × 0.3	P1	POP1.4C	5P	36	5.4	-	24	3	2.5	5	2	1	◎
	P2	POQ1.4C											○
	P3	POR1.4C											△
M1.6 × 0.35	P2	POQ1.6D	5P	36	6.3	-	24	3	2.5	5	2	2	◎
	P3	POR1.6D											△
M1.7 × 0.35	P2	POQ1.7D	5P	36	6.3	-	24	3	2.5	5	2	2	◎
	P3	POR1.7D											○
	P4	POS1.7D											△
M1.8 × 0.35	P2	POQ1.8D	5P	42	6.3	-	27	3	2.5	5	2	2	△
M2 × 0.4	P2	POQ2.0E	5P	42	7.2	12	27	3	2.5	5	3	3	◎
	P3	POR2.0E											○
	P4	POS2.0E											○
M2 × 0.25	P1	POP2.0B	5P	42	4.5	12	27	3	2.5	5	3	4	△
M2.2 × 0.45	P2	POQ2.2F	5P	42	8.1	12	27	3	2.5	5	3	3	○
M2.2 × 0.25	P2	POQ2.2B	5P	42	4.5	12	27	3	2.5	5	3	4	△
M2.3 × 0.4	P2	POQ2.3E	5P	42	7.2	12	27	3	2.5	5	3	3	○
	P3	POR2.3E											△
	P4	POS2.3E											△
M2.5 × 0.45	P2	POQ2.5F	5P	46	8.1	14	29	3	2.5	5	3	3	◎
	P3	POR2.5F											○
	P4	POS2.5F											△
M2.5 × 0.35	P2	POQ2.5D	5P	46	6.3	14	29	3	2.5	5	3	4	△
M2.6 × 0.45	P2	POQ2.6F	5P	46	8.1	14	29	3	2.5	5	3	3	◎
	P3	POR2.6F											○
	P4	POS2.6F											△
M2.6 × 0.35	P2	POQ2.6D	5P	46	6.3	14	29	3	2.5	5	3	4	△
M3 × 0.5	P2	POQ3.0G	5P	46	9	14	26	4	3.2	6	3	3	◎
	P3	POR3.0G											○
	P4	POS3.0G											○
3M0.6	P2	POQ3.0H	5P	46	9	14	26	4	3.2	6	3	3	△
M3 × 0.35	P2	POQ3.0D	5P	46	6.5	14	26	4	3.2	6	3	4	△
M3.5 × 0.6	P2	POQ3.5H	5P	52	11	16	29	5	4	7	3	3	○
	P3	POR3.5H											△
	P4	POS3.5H											△
M3.5 × 0.35	P2	POQ3.5D	5P	52	6.5	16	29	5	4	7	3	4	△
M4 × 0.7	P2	POQ4.0I	5P	52	11	17	29	5	4	7	3	3	◎
	P3	POR4.0I											○
	P4	POS4.0I											○
4M0.75	P2	POQ4.0J	5P	52	11	17	29	5	4	7	3	3	△
M4 × 0.5	P2	POQ4.0G	5P	52	9	17	29	5	4	7	3	4	○
M4.5 × 0.75	P2	POQ4.5J	5P	60	13	21	33	5.5	4.5	7	3	3	△
M4.5 × 0.5	P2	POQ4.5G	5P	60	9	21	33	5.5	4.5	7	3	4	△
M5 × 0.8	P2	POQ5.0K	5P	60	13	22	33	5.5	4.5	7	3	3	◎
	P3	POR5.0K											○
	P4	POS5.0K											○
5M0.9	P2	POQ5.0L	5P	60	13	22	33	5.5	4.5	7	3	3	△

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PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M5 × 0.5	P2	POQ5.0G	5P	60	9	22	33	5.5	4.5	7	3	4	○
M5.5 × 0.9	P2	POQ5.5L	5P	62	15	26	33	6	4.5	7	3	3	△
M5.5 × 0.5	P2	POQ5.5G	5P	62	9	26	33	6	4.5	7	3	4	△
M6 × 1	P2	POQ6.0M	5P	62	15	26	33	6	4.5	7	3	3	◎
	P3	POR6.0M											○
	P4	POS6.0M											○
M6 × 0.75	P2	POQ6.0J	5P	62	15	26	33	6	4.5	7	3	3	○
	P3	POR6.0J											△
M6 × 0.5	P2	POQ6.0G	5P	62	9	26	33	6	4.5	7	3	4	△
M7 × 1	P2	POQ7.0M	5P	70	19	-	36	6.2	5	8	3	5	○
	P3	POR7.0M											△
M7 × 0.75	P2	POQ7.0J	5P	70	19	-	36	6.2	5	8	3	5	△
	P3	POR7.0J											△
M7 × 0.5	P2	POQ7.0G	5P	70	10	-	36	6.2	5	8	3	6	△
M8 × 1.25	P3	POR8.0N	5P	70	19	-	36	6.2	5	8	3	5	◎
	P4	POS8.0N											○
M8 × 1	P3	POR8.0M	5P	70	19	-	36	6.2	5	8	3	5	○
	P4	POS8.0M											△
M8 × 0.75	P3	POR8.0J	5P	70	19	-	36	6.2	5	8	3	5	○
M8 × 0.5	P2	POQ8.0G	5P	70	10	-	36	6.2	5	8	3	6	△
M9 × 1.25	P3	POR9.0N	5P	75	23	-	38	7	5.5	8	3	5	△
M9 × 1	P3	POR9.0M	5P	75	23	-	38	7	5.5	8	3	5	△
M9 × 0.75	P3	POR9.0J	5P	75	13	-	38	7	5.5	8	3	6	△
M9 × 0.5	P2	POQ9.0G	5P	75	11	-	38	7	5.5	8	3	6	△
M10 × 1.5	P3	POR0100	5P	75	23	-	38	7	5.5	8	3	5	◎
	P4	POS0100											○
M10 × 1.25	P3	POR010N	5P	75	23	-	38	7	5.5	8	3	5	◎
	P4	POS010N											△
M10 × 1	P3	POR010M	5P	75	23	-	38	7	5.5	8	3	5	○
	P4	POS010M											△
M10 × 0.75	P3	POR010J	5P	75	13	-	38	7	5.5	8	3	6	△
M10 × 0.5	P2	POQ010G	5P	75	11	-	38	7	5.5	8	3	6	△
M11 × 1.5	P4	POS0110	5P	82	26	-	42	8.5	6.5	9	3	5	△
M11 × 1.25	P3	POR011N	5P	82	26	-	42	8.5	6.5	9	3	5	△
M11 × 1	P3	POR011M	5P	82	26	-	42	8.5	6.5	9	3	5	△
M11 × 0.75	P3	POR011J	5P	82	14	-	42	8.5	6.5	9	3	6	△
M11 × 0.5	P2	POQ011G	5P	82	12	-	42	8.5	6.5	9	3	6	△
M12 × 1.75	P4	POS012P	5P	82	26	-	42	8.5	6.5	9	3	5	◎
	P5	POT012P											△
M12 × 1.5	P3	POR0120	5P	82	26	-	42	8.5	6.5	9	3	5	○
	P4	POS0120											△
	P5	POT0120											△
M12 × 1.25	P4	POS012N	5P	82	26	-	42	8.5	6.5	9	3	5	○
	P5	POT012N											△
M12 × 1	P3	POR012M	5P	82	26	-	42	8.5	6.5	9	3	5	○
	P4	POS012M											△
M12 × 0.75	P3	POR012J	5P	82	14	-	42	8.5	6.5	9	3	6	△
M12 × 0.5	P2	POQ012G	5P	82	12	-	42	8.5	6.5	9	3	6	△
M13 × 1.5	P3	POR0130	5P	88	26	-	45	10.5	8	11	3	5	△
M13 × 1	P3	POR013M	5P	88	26	-	45	10.5	8	11	3	5	△

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

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M14 × 2	P4	POS014Q	5P	88	26	-	45	10.5	8	11	3	5	○
	P5	POT014Q											△
M14 × 1.5	P3	POR014O	5P	88	26	-	45	10.5	8	11	3	5	○
	P4	POS014O											△
M14 × 1.25	P3	POR014N	5P	88	26	-	45	10.5	8	11	3	5	△
M14 × 1	P3	POR014M	5P	88	26	-	45	10.5	8	11	3	5	○
M14 × 0.75	P3	POR014J	5P	88	15	-	45	10.5	8	11	3	6	△
M15 × 2	P4	POS015Q	5P	95	26	-	48	12.5	10	13	3	5	△
M15 × 1.5	P3	POR015O	5P	95	26	-	48	12.5	10	13	3	5	△
M15 × 1	P3	POR015M	5P	95	26	-	48	12.5	10	13	3	5	△
M16 × 2	P4	POS016Q	5P	95	26	-	48	12.5	10	13	3	5	◎
	P5	POT016Q											△
M16 × 1.5	P3	POR016O	5P	95	26	-	48	12.5	10	13	3	5	○
	P4	POS016O											△
	P5	POT016O											△
M16 × 1	P3	POR016M	5P	95	26	-	48	12.5	10	13	3	5	○
M18 × 2.5	P4	POS018R	5P	100	33	-	51	14	11	14	3	5	○
	P5	POT018R											△
M18 × 2	P4	POS018Q	5P	100	33	-	51	14	11	14	3	5	△
M18 × 1.5	P4	POS018O	5P	100	33	-	51	14	11	14	3	5	○
	P5	POT018O											△
M18 × 1	P3	POR018M	5P	100	18	-	51	14	11	14	3	6	○
M20 × 2.5	P4	POS020R	5P	105	33	-	50	15	12	15	3	7	◎
	P5	POT020R											△
M20 × 2	P4	POS020Q	5P	105	33	-	50	15	12	15	3	7	△
M20 × 1.5	P4	POS020O	5P	105	33	-	50	15	12	15	3	7	○
	P5	POT020O											△
M20 × 1	P3	POR020M	5P	105	18	-	50	15	12	15	3	8	○
M22 × 2.5	P4	POS022R	5P	115	33	-	55	17	13	16	3	7	○
	P5	POT022R											△
M22 × 2	P4	POS022Q	5P	115	33	-	55	17	13	16	3	7	△
M22 × 1.5	P4	POS022O	5P	115	33	-	55	17	13	16	3	7	○
	P5	POT022O											△
M22 × 1	P3	POR022M	5P	115	19	-	55	17	13	16	3	8	△
M24 × 3	P4	POS024S	5P	120	39	-	55	19	15	18	3	7	◎
	P5	POT024S											△
M24 × 2	P4	POS024Q	5P	120	39	-	55	19	15	18	3	7	○
M24 × 1.5	P4	POS024O	5P	120	39	-	55	19	15	18	3	7	○
	P5	POT024O											△
M24 × 1	P3	POR024M	5P	120	19	-	55	19	15	18	3	8	△
M25 × 2	P4	POS025Q	5P	125	39	-	58	19	15	18	3	7	△
M25 × 1.5	P4	POS025O	5P	125	39	-	58	19	15	18	3	7	○
M26 × 2	P4	POS026Q	5P	130	39	-	60	20	15	18	4	7	△
M26 × 1.5	P4	POS026O	5P	130	39	-	60	20	15	18	4	7	○
M26 × 1	P3	POR026M	5P	130	20	-	60	20	15	18	4	8	△
M27 × 3	P4	POS027S	5P	130	39	-	60	20	15	18	4	7	○
M27 × 1.5	P4	POS027O	5P	130	39	-	60	20	15	18	4	7	○
M27 × 1	P3	POR027M	5P	130	20	-	60	20	15	18	4	8	△
M28 × 2	P4	POS028Q	5P	135	46	-	62	23	17	20	4	7	△

Spiral Fluted Taps (for blind hole)
 Spiral Fluted Taps (for through hole)
 Spiral Pointed Taps (for through hole)
 Hand Taps
 Cemented Carbide Taps
 Roll Taps
 Special Thread Taps Simple Inspection Tools
 Pipe Taps
 Thread Mills
 Dies
 Center Drills
 Centering Tools

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M28 × 1.5	P4	POS0280	5P	135	46	-	62	23	17	20	4	7	△
M30 × 3.5	P5	POT030T	5P	135	46	-	62	23	17	20	4	7	○
M30 × 3	P4	POS030S	5P	135	46	-	62	23	17	20	4	7	△
M30 × 2	P4	POS030Q	5P	135	46	-	62	23	17	20	4	7	○
M30 × 1.5	P4	POS0300	5P	135	46	-	62	23	17	20	4	7	○
M30 × 1	P3	POR030M	5P	135	21	-	62	23	17	20	4	8	△
M32 × 3	P4	POMS032S	5P	145	46	-	67	24	19	22	4	7	△
M32 × 2	P4	POMS032Q	5P	145	46	-	67	24	19	22	4	7	△
M32 × 1.5	P4	POMS0320	5P	145	46	-	67	24	19	22	4	7	△
M33 × 3.5	P5	POMT033T	5P	145	46	-	67	25	19	22	4	7	○
M33 × 3	P4	POMS033S	5P	145	46	-	67	25	19	22	4	7	△
M33 × 2	P4	POMS033Q	5P	145	46	-	67	25	19	22	4	7	△
M33 × 1.5	P4	POMS0330	5P	145	46	-	67	25	19	22	4	7	△
M35 × 2	P4	POMS035Q	5P	155	52	-	71	28	21	24	4	7	△
M35 × 1.5	P4	POMS0350	5P	155	26	-	71	28	21	24	4	8	△
M36 × 4	P5	POMT036U	5P	155	52	-	71	28	21	24	4	7	○
M36 × 3	P4	POMS036S	5P	155	52	-	71	28	21	24	4	7	△
M36 × 2	P4	POMS036Q	5P	155	52	-	71	28	21	24	4	7	△
M36 × 1.5	P4	POMS0360	5P	155	26	-	71	28	21	24	4	8	△
M38 × 2	P4	POMS038Q	5P	165	52	-	76	30	23	26	4	7	△
M38 × 1.5	P4	POMS0380	5P	165	26	-	76	30	23	26	4	8	△
M39 × 4	P5	POMT039U	5P	165	52	-	76	30	23	26	4	7	△
M39 × 2	P4	POMS039Q	5P	165	52	-	76	30	23	26	4	7	△
M39 × 1.5	P4	POMS0390	5P	165	26	-	76	30	23	26	4	8	△
M40 × 3	P4	POMS040S	5P	175	59	-	81	32	26	30	4	7	△
M40 × 2	P4	POMS040Q	5P	175	59	-	81	32	26	30	4	7	△
M40 × 1.5	P4	POMS0400	5P	175	27	-	81	32	26	30	4	8	△
M42 × 4.5	P5	POMT042V	5P	175	59	-	81	32	26	30	4	7	△
M42 × 2	P4	POMS042Q	5P	175	59	-	81	32	26	30	4	7	△
M42 × 1.5	P4	POMS0420	5P	175	27	-	81	32	26	30	4	8	△
M45 × 4.5	P5	POMT045V	5P	180	59	-	83	35	26	30	4	7	△
M45 × 2	P4	POMS045Q	5P	180	59	-	83	35	26	30	4	7	△
M45 × 1.5	P4	POMS0450	5P	180	27	-	83	35	26	30	4	8	△
M48 × 5	P5	POMT048W	5P	185	65	-	85	38	29	32	4	7	△
M48 × 3	P4	POMS048S	5P	185	65	-	85	38	29	32	4	7	△
M48 × 1.5	P4	POMS0480	5P	185	28	-	85	38	29	32	4	8	△
For Unified Threads													
Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
No.0-80UNF	P1	POPUN0B	5P	36	6.3	-	24	3	2.5	5	2	2	△
No.1-64UNC	P1	POPUN1D	5P	42	7.2	-	27	3	2.5	5	2	2	△
No.1-72UNF	P1	POPUN1C	5P	42	7.2	-	27	3	2.5	5	2	2	△
No.2-56UNC	P1	POPUN2E	5P	42	8.1	12	27	3	2.5	5	3	3	○
No.2-64UNF	P1	POPUN2D	5P	42	8.1	12	27	3	2.5	5	3	3	△
No.3-48UNC	P1	POPUN3F	5P	46	8.1	14	29	3	2.5	5	3	3	△
No.3-56UNF	P1	POPUN3E	5P	46	8.1	14	29	3	2.5	5	3	3	△
No.4-40UNC	P2	POQUN4H	5P	46	9	14	26	4	3.2	6	3	3	○
No.4-48UNF	P1	POPUN4F	5P	46	9	14	26	4	3.2	6	3	3	△
No.5-40UNC	P2	POQUN5H	5P	52	11	16	29	5	4	7	3	3	△
No.5-44UNF	P1	POPUN5G	5P	52	11	16	29	5	4	7	3	3	△
No.6-32UNC	P2	POQUN6J	5P	52	11	16	29	5	4	7	3	3	○

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

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
No.6-40UNF	P2	POQUN6H	5P	52	11	16	29	5	4	7	3	3	△
No.8-32UNC	P2	POQUN8J	5P	60	13	21	33	5.5	4.5	7	3	3	○
No.8-36UNF	P2	POQUN8I	5P	60	13	21	33	5.5	4.5	7	3	3	△
No.10-24UNC	P2	POQUNAM	5P	60	13	22	33	5.5	4.5	7	3	3	○
No.10-32UNF	P2	POQUNAJ	5P	60	13	22	33	5.5	4.5	7	3	3	○
No.12-24UNC	P2	POQUNCM	5P	62	15	26	33	6	4.5	7	3	3	△
No.12-28UNF	P2	POQUNCK	5P	62	15	26	33	6	4.5	7	3	3	△
1/4-20UNC	P2	POQU04N	5P	62	15	26	33	6	4.5	7	3	3	○
1/4-28UNF	P2	POQU04K	5P	62	15	26	33	6	4.5	7	3	3	○
1/4-32UNEF	P2	POQU04J	5P	62	15	26	33	6	4.5	7	3	3	△
5/16-18UNC	P3	PORU05O	5P	70	19	-	36	6.2	5	8	3	5	○
5/16-24UNF	P2	POQU05M	5P	70	19	-	36	6.2	5	8	3	5	○
5/16-32UNEF	P2	POQU05J	5P	70	19	-	36	6.2	5	8	3	5	△
3/8-16UNC	P3	PORU06P	5P	75	23	-	38	7	5.5	8	3	5	○
3/8-24UNF	P2	POQU06M	5P	75	23	-	38	7	5.5	8	3	5	○
3/8-32UNEF	P2	POQU06J	5P	75	13	-	38	7	5.5	8	3	6	△
7/16-14UNC	P3	PORU07Q	5P	82	26	-	42	8.5	6.5	9	3	5	△
7/16-20UNF	P3	PORU07N	5P	82	26	-	42	8.5	6.5	9	3	5	○
7/16-28UNEF	P2	POQU07K	5P	82	26	-	42	8.5	6.5	9	3	5	△
1/2-13UNC	P3	PORU08R	5P	88	26	-	45	10.5	8	11	3	5	○
1/2-20UNF	P3	PORU08N	5P	88	26	-	45	10.5	8	11	3	5	○
1/2-28UNEF	P2	POQU08K	5P	88	26	-	45	10.5	8	11	3	5	△
9/16-12UNC	P3	PORU09S	5P	95	26	-	48	12.5	10	13	3	5	△
9/16-18UNF	P3	PORU09O	5P	95	26	-	48	12.5	10	13	3	5	○
5/8-11UNC	P3	PORU10U	5P	95	26	-	48	12.5	10	13	3	5	△
5/8-18UNF	P3	PORU10O	5P	95	26	-	48	12.5	10	13	3	5	△
3/4-10UNC	P4	POSU12V	5P	105	33	-	50	15	12	15	3	7	△
3/4-16UNF	P3	PORU12P	5P	105	33	-	50	15	12	15	3	7	○
3/4-20UNEF	P3	PORU12N	5P	105	33	-	50	15	12	15	3	7	△
7/8-9UNC	P4	POSU14W	5P	115	33	-	55	17	13	16	3	7	△
7/8-14UNF	P3	PORU14Q	5P	115	33	-	55	17	13	16	3	7	△
1 -8UNC	P4	POSU16X	5P	125	39	-	58	19	15	18	3	7	△
1 -12UNF	P4	POSU16S	5P	125	39	-	58	19	15	18	3	7	△
1 -14UNS	P4	POSU16Q	5P	125	39	-	58	19	15	18	3	7	△
1 1/8-7UNC	P4	POSU18Y	5P	135	46	-	62	23	17	20	4	7	△
1 1/4-7UNC	P4	POMS U20Y	5P	145	46	-	67	24	19	22	4	7	△
1 3/8-6UNC	P5	POMTU22Z	5P	155	52	-	71	28	21	24	4	7	△
1 1/2-6UNC	P5	POMTU24Z	5P	165	52	-	76	30	23	26	4	7	△
For Whitworth Threads													
Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
1/8W40	P2	POQW02H	5P	52	11	17	29	5	4	7	3	3	△
5/32W32	P2	POQW2HJ	5P	52	11	17	29	5	4	7	3	3	△
3/16W24	P2	POQW03M	5P	60	13	21	33	5.5	4.5	7	3	3	○
7/32W24	P2	POQW3HM	5P	62	15	26	33	6	4.5	7	3	3	△
1/4W20	P3	PORW04N	5P	62	15	26	33	6	4.5	7	3	3	○
5/16W18	P3	PORW05O	5P	70	19	-	36	6.2	5	8	3	5	○
3/8W16	P3	PORW06P	5P	75	23	-	38	7	5.5	8	3	5	○
7/16W14	P3	PORW07Q	5P	82	26	-	42	8.5	6.5	9	3	5	△
1/2W12	P3	PORW08S	5P	88	26	-	45	10.5	8	11	3	5	○
9/16W12	P3	PORW09S	5P	95	26	-	48	12.5	10	13	3	5	△

Spiral Fluted Taps (for blind hole)
 Spiral Fluted Taps (for through hole)
 Spiral Pointed Taps (for through hole)
 Hand Taps
 Cemented Carbide Taps
 Roll Taps
 Special Thread Taps Simple Inspection Tools
 Pipe Taps
 Thread Mills
 Dies
 Center Drills
 Centering Tools

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
5/8W11	P3	PORW10U	5P	95	26	-	48	12.5	10	13	3	5	○
3/4W10	P4	POSW12V	5P	105	33	-	50	15	12	15	3	7	○
7/8W9	P4	POSW14W	5P	115	33	-	55	17	13	16	3	7	△
1 W8	P4	POSW16X	5P	125	39	-	58	19	15	18	3	7	△
1 1/8W7	P4	POSW18Y	5P	135	46	-	62	23	17	20	4	7	△
1 1/4W7	P4	POMSW20Y	5P	145	46	-	67	24	19	22	4	7	△
1 3/8W6	P5	POMTW22Z	5P	155	52	-	71	28	21	24	4	7	△
1 1/2W6	P5	POMTW24Z	5P	165	52	-	76	30	23	26	4	7	△
For Screw Threads used on Sewing Machines													
Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
3/32SM56	P1	POPS06E	5P	46	8.1	14	29	3	2.5	5	3	3	△
1/8SM40	P2	POQS08H	5P	52	11	16	29	5	4	7	3	3	△
1/8SM44	P2	POQS08G	5P	52	11	16	29	5	4	7	3	3	△
9/64SM40	P2	POQS09H	5P	52	11	17	29	5	4	7	3	3	△
11/64SM40	P2	POQS11H	5P	60	13	21	33	5.5	4.5	7	3	3	△
3/16SM28	P2	POQS12K	5P	60	13	21	33	5.5	4.5	7	3	3	△
3/16SM32	P2	POQS12J	5P	60	13	21	33	5.5	4.5	7	3	3	△
7/32SM32	P2	POQS14J	5P	62	15	26	33	6	4.5	7	3	3	△
15/64SM28	P2	POQS15K	5P	62	15	26	33	6	4.5	7	3	3	△
1/4SM24	P2	POQS16M	5P	62	15	26	33	6	4.5	7	3	3	△
1/4SM40	P2	POQS16H	5P	62	8.6	26	33	6	4.5	7	3	4	△

Spiral Fluted Taps
(for blind hole)Spiral Fluted Taps
(for through hole)Spiral Pointed Taps
(for through hole)

Hand Taps

Cemented
Carbide Taps

Roll Taps

Special Thread Taps
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools

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

+PO

Plus Series Spiral Pointed Taps

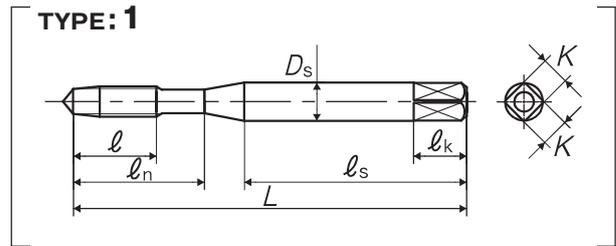
Specification



Recommended Tapping Speeds depending on Materials

Medium carbon steels
中炭素鋼
10~15
(m/min)

For icon explanation, refer to P.24



Segment : 1E

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	Stock
For Metric Threads													
M3 × 0.5	P2	PNPQ3.0G	5P	46	9	14	26	4	3.2	6	3	1	◎
M3.5 × 0.6	P2	PNPQ3.5H	5P	52	11	16	29	5	4	7	3	1	○
M4 × 0.7	P2	PNPQ4.0I	5P	52	11	17	29	5	4	7	3	1	◎
M5 × 0.8	P2	PNPQ5.0K	5P	60	13	22	33	5.5	4.5	7	3	1	◎
M6 × 1	P2	PNPQ6.0M	5P	62	15	26	33	6	4.5	7	3	1	◎

Spiral Fluted Taps (for blind hole)
Spiral Fluted Taps (for through hole)
Spiral Pointed Taps (for through hole)
Hand Taps
Cemented Carbide Taps
Roll Taps
Special Thread Taps Simple Inspection Tools
Pipe Taps
Thread Mills
Dies
Center Drills
Centering Tools

PO OX

Spiral Pointed Taps, Oxided
Specification

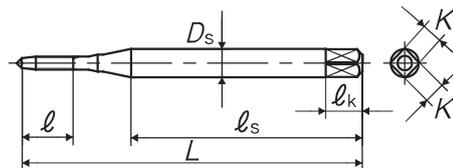


Recommended Tapping Speeds depending on Materials

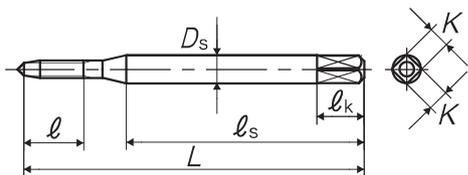
Low carbon steels 低碳素鋼	Medium carbon steels 中炭素鋼
5~10 (m/min)	5~10 (m/min)

For icon explanation, refer to P.24

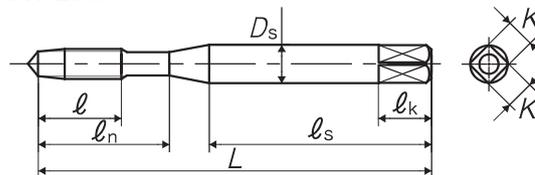
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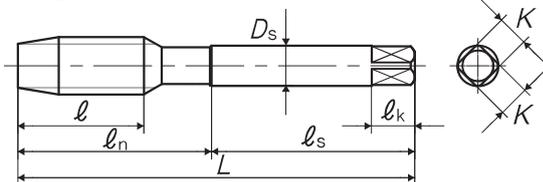
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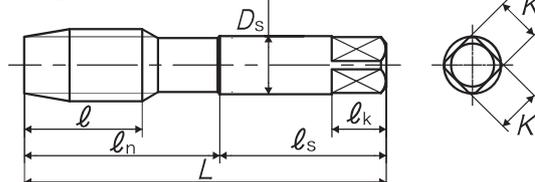
TYPE: 3



TYPE: 4



TYPE: 5



Oversize
Segment : 1E

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
For Metric Threads													
M1.4 × 0.3	P1	POP1.4CX	5P	36	5.4	-	24	3	2.5	5	2	1	△
	P2	POQ1.4CX											
M1.6 × 0.35	P2	POQ1.6DX	5P	36	6.3	-	24	3	2.5	5	2	2	△
M1.7 × 0.35	P2	POQ1.7DX	5P	36	6.3	-	24	3	2.5	5	2	2	△
M2 × 0.4	P2	POQ2.0EX	5P	42	7.2	12	27	3	2.5	5	3	3	○
	P3	POR2.0EX											△
M2.3 × 0.4	P2	POQ2.3EX	5P	42	7.2	12	27	3	2.5	5	3	3	△
M2.5 × 0.45	P2	POQ2.5FX	5P	46	8.1	14	29	3	2.5	5	3	3	△
	P3	POR2.5FX											
M2.6 × 0.45	P2	POQ2.6FX	5P	46	8.1	14	29	3	2.5	5	3	3	△
	P3	POR2.6FX											
M3 × 0.5	P2	POQ3.0GX	5P	46	9	14	26	4	3.2	6	3	3	◎
	P3	POR3.0GX											△
	P4	POS3.0GX											

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

PO OX Spiral Pointed Taps, Oxided

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
3M0.6	P2	POQ3.0HX	5P	46	9	14	26	4	3.2	6	3	3	△
M3.5 × 0.6	P2	POQ3.5HX	5P	52	11	16	29	5	4	7	3	3	△
M4 × 0.7	P2	POQ4.0IX	5P	52	11	17	29	5	4	7	3	3	⊙
	P3	POR4.0IX											△
4M0.75	P2	POQ4.0JX	5P	52	11	17	29	5	4	7	3	3	△
M5 × 0.8	P2	POQ5.0KX	5P	60	13	22	33	5.5	4.5	7	3	3	⊙
	P3	POR5.0KX											△
5M0.9	P2	POQ5.0LX	5P	60	13	22	33	5.5	4.5	7	3	3	△
M6 × 1	P2	POQ6.0MX	5P	62	15	26	33	6	4.5	7	3	3	⊙
	P3	POR6.0MX											△
M8 × 1.25	P3	POR8.0NX	5P	70	19	-	36	6.2	5	8	3	4	⊙
	P4	POS8.0NX											△
M8 × 1	P3	POR8.0MX	5P	70	19	-	36	6.2	5	8	3	4	△
M10 × 1.5	P3	POR0100X	5P	75	23	-	38	7	5.5	8	3	4	○
	P4	POS0100X											△
M10 × 1.25	P3	POR010NX	5P	75	23	-	38	7	5.5	8	3	4	△
M10 × 1	P3	POR010MX	5P	75	23	-	38	7	5.5	8	3	4	△
	P4	POS010MX											△
M12 × 1.75	P4	POS012PX	5P	82	26	-	42	8.5	6.5	9	3	4	○
M12 × 1.5	P3	POR0120X	5P	82	26	-	42	8.5	6.5	9	3	4	△
M12 × 1.25	P4	POS012NX	5P	82	26	-	42	8.5	6.5	9	3	4	△
M14 × 2	P4	POS014QX	5P	88	26	-	45	10.5	8	11	3	4	△
M14 × 1.5	P3	POR0140X	5P	88	26	-	45	10.5	8	11	3	4	△
M14 × 1	P3	POR014MX	5P	88	26	-	45	10.5	8	11	3	4	△
M16 × 2	P4	POS016QX	5P	95	26	-	48	12.5	10	13	3	4	○
M16 × 1.5	P3	POR0160X	5P	95	26	-	48	12.5	10	13	3	4	△
M18 × 2.5	P4	POS018RX	5P	100	33	-	51	14	11	14	3	4	△
M18 × 1.5	P4	POS0180X	5P	100	33	-	51	14	11	14	3	4	△
M20 × 2.5	P4	POS020RX	5P	105	33	-	50	15	12	15	3	5	○
M20 × 1.5	P4	POS0200X	5P	105	33	-	50	15	12	15	3	5	△
M22 × 2.5	P4	POS022RX	5P	115	33	-	55	17	13	16	3	5	△
M22 × 1.5	P4	POS0220X	5P	115	33	-	55	17	13	16	3	5	△
M24 × 3	P4	POS024SX	5P	120	39	-	55	19	15	18	3	5	△
M27 × 3	P4	POS027SX	5P	130	39	-	60	20	15	18	4	5	△
M30 × 3.5	P5	POT030TX	5P	135	46	-	62	23	17	20	4	5	△
M33 × 3.5	P5	POMT033TX	5P	145	46	-	67	25	19	22	4	5	△
M36 × 4	P5	POMT036UX	5P	155	52	-	71	28	21	24	4	5	△
M42 × 4.5	P5	POMT042VX	5P	175	59	-	81	32	26	30	4	5	△

Spiral Fluted Taps
(for blind hole)Spiral Fluted Taps
(for through hole)Spiral Pointed Taps
(for through hole)

Hand Taps

Cemented
Carbide Taps

Roll Taps

Special Thread Taps
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools

+PO OX

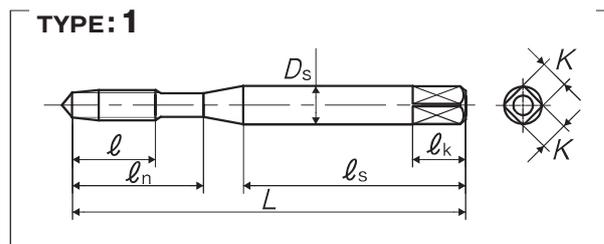
Plus Series Spiral Pointed Taps, Oxidized Specification



Recommended Tapping Speeds depending on Materials

Low carbon steels 低碳素鋼	Medium carbon steels 中炭素鋼
10~15 (m/min)	10~15 (m/min)

For icon explanation, refer to P.24



○ Oversize

Segment: 1E

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	Stock
For Metric Threads													
M3 × 0.5	P2	PNPQ3.0GX	5P	46	9	14	26	4	3.2	6	3	1	○
	P3	PNPR3.0GX											△
	P4	PNPS3.0GX											△
M3.5 × 0.6	P2	PNPQ3.5HX	5P	52	11	16	29	5	4	7	3	1	△
	P3	PNPQ4.0IX											○
	P4	PNPS4.0IX											△
M4 × 0.7	P2	PNPQ4.0IX	5P	52	11	17	29	5	4	7	3	1	○
	P3	PNPR4.0IX											△
	P4	PNPS4.0IX											△
M5 × 0.8	P2	PNPQ5.0KX	5P	60	13	22	33	5.5	4.5	7	3	1	○
	P3	PNPR5.0KX											△
	P4	PNPS5.0KX											△
M6 × 1	P2	PNPQ6.0MX	5P	62	15	26	33	6	4.5	7	3	1	○
	P3	PNPR6.0MX											△
	P4	PNPS6.0MX											△

Spiral Pointed Taps (for blind hole)
Spiral Fluted Taps (for through hole)
Spiral Fluted Taps (for through hole)
Spiral Pointed Taps (for through hole)
Hand Taps
Cemented Carbide Taps
Roll Taps
Special Thread Taps (Simple inspection tools)
Pipe Taps
Thread Mills
Dies
Center Drills
Centering Tools

PO LH

Spiral Pointed Taps for Left Hand Threads Specification

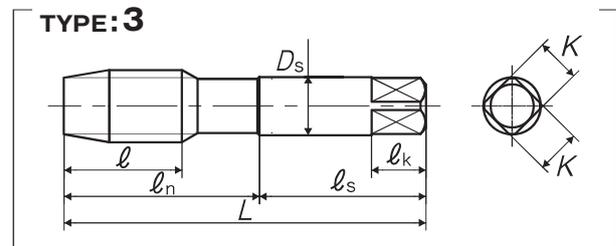
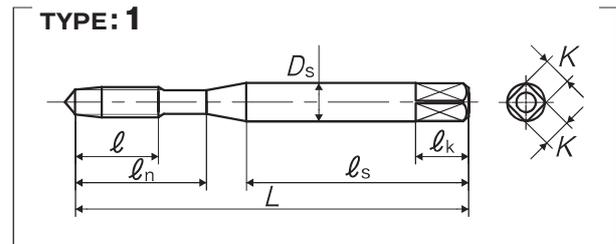
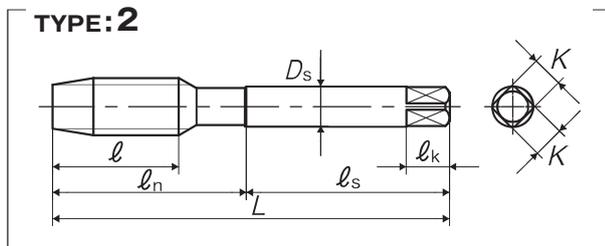


Recommended Tapping Speeds depending on Materials

Medium carbon steels
中炭素鋼
5~10
(m/min)

For icon explanation, refer to P.24

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



Segment : 1E

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	Stock
For Metric Threads													
M3 × 0.5	P2	POQ3.0G--L	5P	46	9	14	26	4	3.2	6	3	1	△
M4 × 0.7	P2	POQ4.0I--L	5P	52	11	17	29	5	4	7	3	1	△
M5 × 0.8	P2	POQ5.0K--L	5P	60	13	22	33	5.5	4.5	7	3	1	△
M6 × 1	P2	POQ6.0M--L	5P	62	15	26	33	6	4.5	7	3	1	△
M8 × 1.25	P3	POR8.0N--L	5P	70	19	-	36	6.2	5	8	3	2	△
M8 × 1	P3	POR8.0M--L	5P	70	19	-	36	6.2	5	8	3	2	△
M10 × 1.5	P3	POR0100--L	5P	75	23	-	38	7	5.5	8	3	2	△
M10 × 1.25	P3	POR010N--L	5P	75	23	-	38	7	5.5	8	3	2	△
M10 × 1	P3	POR010M--L	5P	75	23	-	38	7	5.5	8	3	2	△
M12 × 1.75	P4	POS012P--L	5P	82	26	-	42	8.5	6.5	9	3	2	△
M12 × 1.5	P3	POR0120--L	5P	82	26	-	42	8.5	6.5	9	3	2	△
M12 × 1.25	P4	POS012N--L	5P	82	26	-	42	8.5	6.5	9	3	2	△
M14 × 2	P4	POS014Q--L	5P	88	26	-	45	10.5	8	11	3	2	△
M14 × 1.5	P3	POR0140--L	5P	88	26	-	45	10.5	8	11	3	2	△
M16 × 2	P4	POS016Q--L	5P	95	26	-	48	12.5	10	13	3	2	△
M16 × 1.5	P3	POR0160--L	5P	95	26	-	48	12.5	10	13	3	2	△
M18 × 2.5	P4	POS018R--L	5P	100	33	-	51	14	11	14	3	2	△
M18 × 1.5	P4	POS0180--L	5P	100	33	-	51	14	11	14	3	2	△
M20 × 2.5	P4	POS020R--L	5P	105	33	-	50	15	12	15	3	3	△
M20 × 1.5	P4	POS0200--L	5P	105	33	-	50	15	12	15	3	3	△
M22 × 2.5	P4	POS022R--L	5P	115	33	-	55	17	13	16	3	3	△
M22 × 1.5	P4	POS0220--L	5P	115	33	-	55	17	13	16	3	3	△
M24 × 3	P4	POS024S--L	5P	120	39	-	55	19	15	18	3	3	△

Spiral Fluted Taps (for blind hole)
Spiral Fluted Taps (for through hole)
Spiral Pointed Taps (for through hole)
Hand Taps
Cemented Carbide Taps
Roll Taps
Special Thread Taps Simple Inspection Tools
Pipe Taps
Thread Mills
Dies
Center Drills
Centering Tools

PO LH Spiral Pointed Taps for Left Hand Threads

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M24 × 1.5	P4	POS0240--L	5P	120	39	-	55	19	15	18	3	3	△
M27 × 3	P4	POS027S--L	5P	130	39	-	60	20	15	18	4	3	△
M27 × 1.5	P4	POS0270--L	5P	130	39	-	60	20	15	18	4	3	△
M30 × 3.5	P5	POT030T--L	5P	135	46	-	62	23	17	20	4	3	△
M30 × 1.5	P4	POS0300--L	5P	135	46	-	62	23	17	20	4	3	△
For Unified Threads													
Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
1/4-20UNC	P2	POQU04N--L	5P	62	15	26	33	6	4.5	7	3	1	△
1/4-28UNF	P2	POQU04K--L	5P	62	15	26	33	6	4.5	7	3	1	△
5/16-18UNC	P3	PORU050--L	5P	70	19	-	36	6.2	5	8	3	2	△
5/16-24UNF	P2	POQU05M--L	5P	70	19	-	36	6.2	5	8	3	2	△
3/8-16UNC	P3	PORU06P--L	5P	75	23	-	38	7	5.5	8	3	2	△
3/8-24UNF	P2	POQU06M--L	5P	75	23	-	38	7	5.5	8	3	2	△
7/16-14UNC	P3	PORU07Q--L	5P	82	26	-	42	8.5	6.5	9	3	2	△
7/16-20UNF	P3	PORU07N--L	5P	82	26	-	42	8.5	6.5	9	3	2	△
1/2-13UNC	P3	PORU08R--L	5P	88	26	-	45	10.5	8	11	3	2	△
1/2-20UNF	P3	PORU08N--L	5P	88	26	-	45	10.5	8	11	3	2	△
For Whitworth Threads													
Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
1/4W20	P3	PORW04N--L	5P	62	15	26	33	6	4.5	7	3	1	△
5/16W18	P3	PORW050--L	5P	70	19	-	36	6.2	5	8	3	2	△
3/8W16	P3	PORW06P--L	5P	75	23	-	38	7	5.5	8	3	2	△
1/2W12	P3	PORW08S--L	5P	88	26	-	45	10.5	8	11	3	2	△
5/8W11	P3	PORW10U--L	5P	95	26	-	48	12.5	10	13	3	2	△
3/4W10	P4	POSW12V--L	5P	105	33	-	50	15	12	15	3	3	△

Spiral Fluted Taps (for blind hole)
 Spiral Fluted Taps (for through hole)
 Spiral Pointed Taps (for through hole)
 Hand Taps
 Cemented Carbide Taps
 Roll Taps
 Special Thread Taps Simple inspection tools
 Pipe Taps
 Thread Mills
 Dies
 Center Drills
 Centering Tools

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

PO V

Spiral Pointed Taps, Coated Specification

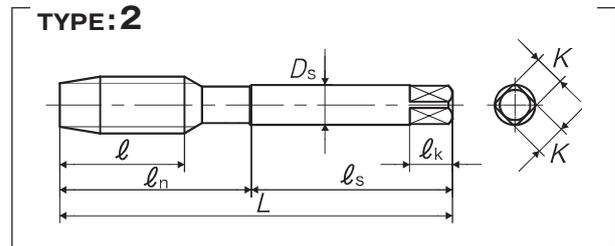
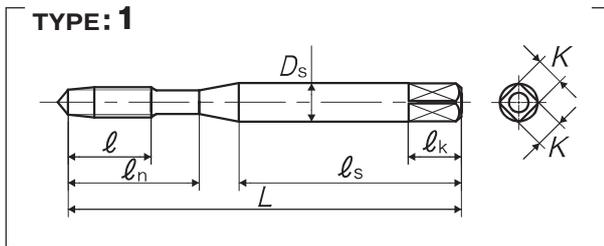


■ Adopting the optimum coating for the tapping condition.

Recommended Tapping Speeds depending on Materials

Low carbon steels 低碳素鋼	Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼
10~20 (m/min)	10~20 (m/min)	10~20 (m/min)

For icon explanation, refer to P.24



Segment : 1E

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	Stock
For Metric Threads													
M3 × 0.5	P2	VPOQ3.0G	5P	46	9	14	26	4	3.2	6	3	1	◎
M4 × 0.7	P2	VPOQ4.0I	5P	52	11	17	29	5	4	7	3	1	◎
M5 × 0.8	P2	VPOQ5.0K	5P	60	13	22	33	5.5	4.5	7	3	1	◎
M6 × 1	P2	VPOQ6.0M	5P	62	15	26	33	6	4.5	7	3	1	◎
M8 × 1.25	P3	VPOR8.0N	5P	70	19	-	36	6.2	5	8	3	2	◎
M10 × 1.5	P3	VPOR100	5P	75	23	-	38	7	5.5	8	3	2	○
M10 × 1.25	P3	VPOR10N	5P	75	23	-	38	7	5.5	8	3	2	○
M12 × 1.75	P4	VPOS012P	5P	82	26	-	42	8.5	6.5	9	3	2	○
M12 × 1.5	P3	VPOR120	5P	82	26	-	42	8.5	6.5	9	3	2	○
M12 × 1.25	P4	VPOS012N	5P	82	26	-	42	8.5	6.5	9	3	2	○

Spiral Fluted Taps
(for blind hole)

Spiral Fluted Taps
(for through hole)

Spiral Pointed Taps
(for through hole)

Hand Taps

Cemented
Carbide Taps

Roll Taps

Special Thread Taps
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools

Spiral Pointed Taps (for blind hole)
 Spiral Fluted Taps (for through hole)
 Spiral Fluted Taps (for through hole)
 Spiral Pointed Taps (for through hole)
 Hand Taps
 Cemented Carbide Taps
 Roll Taps
 Special Thread Taps (Simple inspection tools)
 Pipe Taps
 Thread Mills
 Dies
 Center Drills
 Centering Tools

LS-PO

Long Shank Spiral Pointed Taps Specification

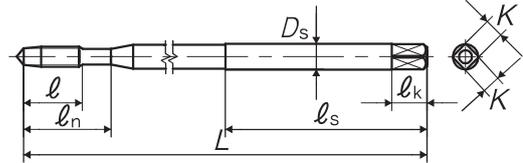


Recommended Tapping Speeds depending on Materials

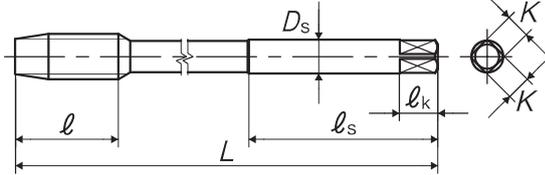
Medium carbon steels
中炭素鋼
5~10
(m/min)

For icon explanation, refer to P.24

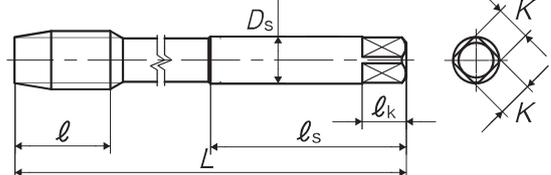
TYPE: 1



TYPE: 2



TYPE: 3



Oversize
Segment: 1E

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
For Metric Threads													
M2 × 0.4	P2	POQ2.0EL07	5P	70	7.2	12	55	3	2.5	5	3	1	△
		POQ2.0EL10		100			85						
M2.3 × 0.4	P2	POQ2.3EL07	5P	70	7.2	12	55	3	2.5	5	3	1	△
		POQ2.3EL10		100			85						
M2.5 × 0.45	P2	POQ2.5FL07	5P	70	8.1	14	53	3	2.5	5	3	1	△
		POQ2.5FL10		100			83						
M2.6 × 0.45	P2	POQ2.6FL07	5P	70	8.1	14	53	3	2.5	5	3	1	△
		POQ2.6FL10		100			83						
M3 × 0.5	P2	POQ3.0GL07	5P	70	9	14	40	4	3.2	6	3	1	△
		POQ3.0GL10		100									◎
		POQ3.0GL12		120									△
		POQ3.0GL15		150									○
	P3	POR3.0GL10	100	△									
		POR3.0GL15	150	△									
M4 × 0.7	P2	POQ4.0IL07	5P	70	11	17	40	5	4	7	3	1	△
		POQ4.0IL10		100									◎
		POQ4.0IL12		120									△
		POQ4.0IL15		150									○
	P3	POR4.0IL10		100									△
		POR4.0IL15		150									△

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

LS-PO Long Shank Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M5 × 0.8	P2	POQ5.0KL10	5P	100	13	22	40	5.5	4.5	7	3	1	◎
		POQ5.0KL12		120									△
		POQ5.0KL15		150									○
	P3	POR5.0KL10		100									△
		POR5.0KL15		150									△
		P4		POS5.0KL15									150
M6 × 1	P2		POQ6.0ML10	5P	15	26	40	6	4.5	7	3	1	◎
			POQ6.0ML12										120
		POQ6.0ML15	150										○
	POQ6.0ML20	200	△										
	P3	POR6.0ML10	100										△
		POR6.0ML15	150										△
P4		POS6.0ML15	150	△									
	M8 × 1.25	P3	POR8.0NL10	5P	19	-	50	6.2	5	8	3	2	◎
			POR8.0NL12										120
POR8.0NL15			150										◎
POR8.0NL20			200										△
P4		POS8.0NL15	150										△
M8 × 1	P3	POR8.0ML10	5P	100	19	-	50	6.2	5	8	3	2	△
		POR8.0ML15		150									△
M10 × 1.5	P3	POR0100L10	5P	100	23	-	50	7	5.5	8	3	2	◎
		POR0100L12		120									△
		POR0100L15		150									◎
		POR0100L20		200									△
	P4	POS0100L15		150									△
M10 × 1.25	P3	POR010NL10	5P	100	23	-	50	7	5.5	8	3	2	○
		POR010NL15		150									△
		POR010NL20		200									△
M10 × 1	P3	POR010ML10	5P	100	23	-	50	7	5.5	8	3	2	△
		POR010ML15		150									△
M12 × 1.75	P4	POS012PL10	5P	100	26	-	50	8.5	6.5	9	3	2	△
		POS012PL12		120									△
		POS012PL15		150									◎
		POS012PL20		200									○
	P5	POT012PL15		150									△
M12 × 1.5	P3	POR0120L10	5P	100	26	-	50	8.5	6.5	9	3	2	△
		POR0120L15		150									△
		POR0120L20		200									△
M12 × 1.25	P4	POS012NL10	5P	100	26	-	50	8.5	6.5	9	3	2	△
		POS012NL15		150									△
		POS012NL20		200									△
M12 × 1	P3	POR012ML10	5P	100	26	-	50	8.5	6.5	9	3	2	△
		POR012ML15		150									△
M14 × 2	P4	POS014QL12	5P	120	26	-	60	10.5	8	11	3	2	△
		POS014QL15		150									○
		POS014QL20		200									△
	P5	POT014QL15		150									△
M14 × 1.5	P3	POR0140L15	5P	150	26	-	60	10.5	8	11	3	2	△
		POR0140L20		200									△

◎=Standard ○=Semi standard △=Made to order
 Spiral Fluted Taps (for blind hole)
 Spiral Fluted Taps (for through hole)
 Spiral Pointed Taps (for through hole)
 Hand Taps
 Cemented Carbide Taps
 Roll Taps
 Special Thread Taps (Simple Inspection Tools)
 Pipe Taps
 Thread Mills
 Dies
 Center Drills
 Centering Tools

Spiral Pointed Tap Series for through hole

LS-PO Long Shank Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M16 × 2	P4	POS016QL15	5P	150	26	-	60	12.5	10	13	3	2	◎
		POS016QL20		200									○
		POS016QL25		250									△
	P5	POT016QL15	150	△									
M16 × 1.5	P3	POR016OL15	5P	150	26	-	60	12.5	10	13	3	2	○
		POR016OL20		200									△
M18 × 2.5	P4	POS018RL15	5P	150	33	-	70	14	11	14	3	2	○
		POS018RL20		200									△
	P5	POT018RL15	150	△									
M18 × 1.5	P4	POS018OL15	5P	150	33	-	70	14	11	14	3	2	△
		POS018OL20		200									△
M20 × 2.5	P4	POS020RL15	5P	150	33	-	70	15	12	15	3	3	◎
		POS020RL20		200									○
		POS020RL25		250									△
	P5	POT020RL15	150	△									
M20 × 1.5	P4	POS020OL15	5P	150	33	-	70	15	12	15	3	3	○
		POS020OL20		200									△
M22 × 2.5	P4	POS022RL15	5P	150	33	-	70	17	13	16	3	3	△
		POS022RL20		200									△
M22 × 1.5	P4	POS022OL15	5P	150	33	-	70	17	13	16	3	3	○
		POS022OL20		200									△
M24 × 3	P4	POS024SL15	5P	150	39	-	80	19	15	18	3	3	○
		POS024SL20		200									△
		POS024SL25		250									△
M24 × 1.5	P4	POS024OL15	5P	150	39	-	80	19	15	18	3	3	△
		POS024OL20		200									△
M27 × 3	P4	POS027SL20	5P	200	39	-	80	20	15	18	4	3	△
M27 × 1.5	P4	POS027OL20	5P	200	39	-	80	20	15	18	4	3	△
		POS027OL25		250									△
M30 × 3.5	P5	POT030TL20	5P	200	46	-	80	23	17	20	4	3	△
		POT030TL25		250									△
		POT030TL30		300									△
M30 × 1.5	P4	POS030OL20	5P	200	46	-	80	23	17	20	4	3	△
		POS030OL25		250									△
For Unified Threads													
Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
1/4-20UNC	P2	POQU04NL10	5P	100	15	26	40	6	4.5	7	3	1	△
		POQU04NL15		150									△
1/4-28UNF	P2	POQU04KL10	5P	100	15	26	40	6	4.5	7	3	1	△
		POQU04KL15		150									△
5/16-18UNC	P3	PORU05OL10	5P	100	19	-	50	6.2	5	8	3	2	△
		PORU05OL15		150									△
5/16-24UNF	P2	POQU05ML10	5P	100	19	-	50	6.2	5	8	3	2	△
		POQU05ML15		150									△
3/8-16UNC	P3	PORU06PL10	5P	100	23	-	50	7	5.5	8	3	2	△
		PORU06PL15		150									△
3/8-24UNF	P2	POQU06ML10	5P	100	23	-	50	7	5.5	8	3	2	△
		POQU06ML15		150									△
7/16-14UNC	P3	PORU07QL15	5P	150	26	-	50	8.5	6.5	9	3	2	△

LS-PO Long Shank Spiral Pointed Taps

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

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
7/16-20UNF	P3	PORU07NL15	5P	150	26	-	50	8.5	6.5	9	3	2	△
1/2-13UNC	P3	PORU08RL15	5P	150	26	-	60	10.5	8	11	3	2	△
		PORU08RL20		200									
1/2-20UNF	P3	PORU08NL15	5P	150	26	-	60	10.5	8	11	3	2	△
		PORU08NL20		200									
5/8-11UNC	P3	PORU10UL15	5P	150	26	-	60	12.5	10	13	3	2	△
		PORU10UL20		200									
5/8-18UNF	P3	PORU100L15	5P	150	26	-	60	12.5	10	13	3	2	△
		PORU100L20		200									
3/4-10UNC	P4	POSU12VL15	5P	150	33	-	70	15	12	15	3	3	△
		POSU12VL20		200									
3/4-16UNF	P3	PORU12PL15	5P	150	33	-	70	15	12	15	3	3	△
		PORU12PL20		200									
7/8-9UNC	P4	POSU14WL20	5P	200	33	-	70	17	13	16	3	3	△
7/8-14UNF	P3	PORU14QL20	5P	200	33	-	70	17	13	16	3	3	△
1 -8UNC	P4	POSU16XL20	5P	200	39	-	80	19	15	18	3	3	△
1 -12UNF	P4	POSU16SL20	5P	200	39	-	80	19	15	18	3	3	△
For Whitworth Threads													
Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
1/4W20	P3	PORW04NL10	5P	100	15	26	40	6	4.5	7	3	1	△
		PORW04NL15		150									
5/16W18	P3	PORW05OL10	5P	100	19	-	50	6.2	5	8	3	2	△
		PORW05OL15		150									
3/8W16	P3	PORW06PL10	5P	100	23	-	50	7	5.5	8	3	2	△
		PORW06PL15		150									
7/16W14	P3	PORW07QL15	5P	150	26	-	50	8.5	6.5	9	3	2	△
1/2W12	P3	PORW08SL15	5P	150	26	-	60	10.5	8	11	3	2	△
		PORW08SL20		200									
5/8W11	P3	PORW10UL15	5P	150	26	-	60	12.5	10	13	3	2	△
		PORW10UL20		200									
3/4W10	P4	POSW12VL15	5P	150	33	-	70	15	12	15	3	3	△
		POSW12VL20		200									
7/8W9	P4	POSW14WL15	5P	150	33	-	70	17	13	16	3	3	△
		POSW14WL20		200									
1 W8	P4	POSW16XL15	5P	150	39	-	80	19	15	18	3	3	△
		POSW16XL20		200									

Spiral Fluted Taps (for blind hole)
 Spiral Fluted Taps (for through hole)
 Spiral Pointed Taps (for through hole)
 Hand Taps
 Cemented Carbide Taps
 Roll Taps
 Special Thread Taps Simple Inspection Tools
 Pipe Taps
 Thread Mills
 Dies
 Center Drills
 Centering Tools

Spiral Fluted Taps (for blind hole)
 Spiral Fluted Taps (for through hole)
 Spiral Pointed Taps (for through hole)
 Hand Taps
 Cemented Carbide Taps
 Roll Taps
 Special Thread Taps Simple inspection tools
 Pipe Taps
 Thread Mills
 Dies
 Center Drills
 Centering Tools

LS-PO V

Long Shank Spiral Pointed Taps, Coated Specification

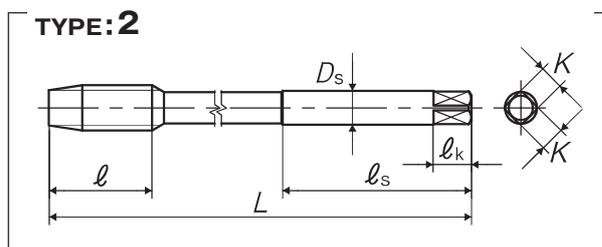
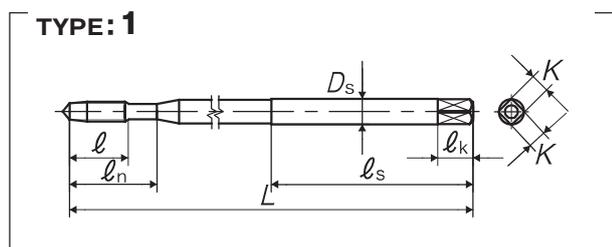


■ Adopting the optimum coating for the tapping condition.

Recommended Tapping Speeds depending on Materials

Low carbon steels 低碳素鋼	Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼
10~20 (m/min)	10~20 (m/min)	10~20 (m/min)

For icon explanation, refer to P.24



Segment : 1E

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
For Metric Threads													
M3 × 0.5	P2	VPOQ3.0GL10	5P	100	9	14	40	4	3.2	6	3	1	○
M4 × 0.7	P2	VPOQ4.0IL10	5P	100	11	17	40	5	4	7	3	1	○
M5 × 0.8	P2	VPOQ5.0KL10	5P	100	13	22	40	5.5	4.5	7	3	1	○
M6 × 1	P2	VPOQ6.0ML10	5P	100	15	26	40	6	4.5	7	3	1	○
		VPOQ6.0ML15		150									△
M8 × 1.25	P3	VPOR8.0NL10	5P	100	19	-	50	6.2	5	8	3	2	○
		VPOR8.0NL15		150									○
M10 × 1.5	P3	VPOR0100L15	5P	150	23	-	50	7	5.5	8	3	2	○
M10 × 1.25	P3	VPOR010NL15	5P	150	23	-	50	7	5.5	8	3	2	△
M12 × 1.75	P4	VPOS012PL15	5P	150	26	-	50	8.5	6.5	9	3	2	○
M12 × 1.5	P3	VPOR0120L15	5P	150	26	-	50	8.5	6.5	9	3	2	△
		VPOS012NL15											150

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

LS-PO-K

Long Shank Spiral Pointed Taps with Neck Specification

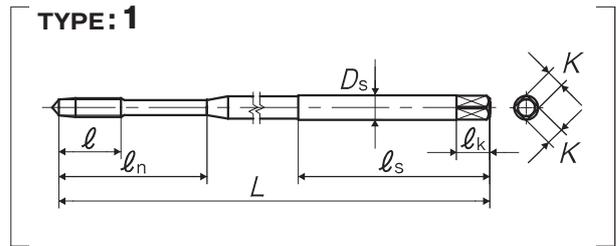


■LS-PO-K is the long shank spiral pointed tap and, having long neck, enables the tapping of rather deep holes.

Recommended Tapping Speeds depending on Materials

Medium carbon steels
中炭素鋼
5~10
(m/min)

For icon explanation, refer to P.24



Segment : 1E

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	Stock
For Metric Threads													
M3 × 0.5	P2	-	4.5P	100	9	28	40	4	3.2	6	3	1	△
M4 × 0.7	P2	-	4.5P	100	11	31	40	5	4	7	3	1	△
M5 × 0.8	P2	-	4.5P	100	13	38	40	5.5	4.5	7	3	1	△
M6 × 1	P2	-	4.5P	100	15	45	40	6	4.5	7	3	1	△

Spiral Fluted Taps (for blind hole)
Spiral Fluted Taps (for through hole)
Spiral Pointed Taps (for through hole)
Hand Taps
Cemented Carbide Taps
Roll Taps
Special Thread Taps Simple Inspection Tools
Pipe Taps
Thread Mills
Dies
Center Drills
Centering Tools

SU+PO/SU-PO

Spiral Pointed Taps for Stainless Steels Specification



■ Suitable for stainless steels tending to work harden and sticky, as well as chrome steels and molybdenum steels. Through hole use.

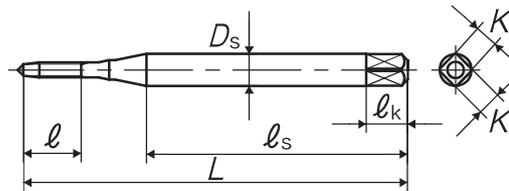
Recommended Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 ~10 (m/min)	Medium carbon steels 中炭素鋼 ~10 (m/min)	Stainless steels ステンレス鋼 ~10 (m/min)
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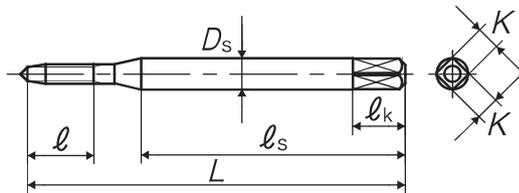
For icon explanation, refer to P.24

SU+PO	~M2.6
SU-PO	M3~, all U, all W

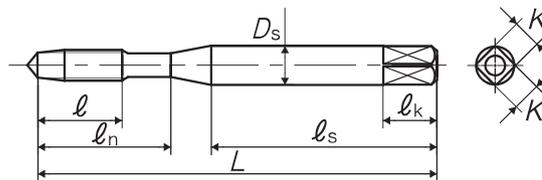
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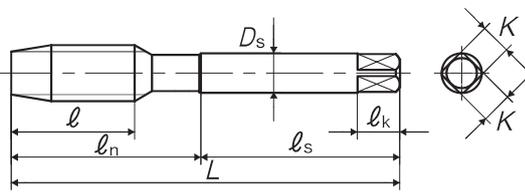
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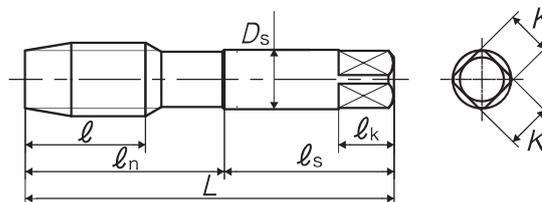
TYPE: 3



TYPE: 4



TYPE: 5



○ Oversize
Segment: 1E

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
For Metric Threads													
M1.4 × 0.3	P1	PUPP1.4C	5P	36	5.4	-	24	3	2.5	5	2	1	△
M1.6 × 0.35	P2	PUPQ1.6D	5P	36	6.3	-	24	3	2.5	5	2	2	△
M1.7 × 0.35	P2	PUPQ1.7D	5P	36	6.3	-	24	3	2.5	5	2	2	△
M2 × 0.4	P2	PUPQ2.0E	5P	42	7.2	12	27	3	2.5	5	2	3	○
	P3	PUPR2.0E											△
M2.3 × 0.4	P2	PUPQ2.3E	5P	42	7.2	12	27	3	2.5	5	2	3	○
	P3	PUPR2.3E											△
M2.5 × 0.45	P2	PUPQ2.5F	5P	46	8.1	14	29	3	2.5	5	2	3	○
	P3	PUPR2.5F											△
M2.6 × 0.45	P2	PUPQ2.6F	5P	46	8.1	14	29	3	2.5	5	2	3	○
	P3	PUPR2.6F											△
M3 × 0.5	P2	PUMQ3.0G	5P	46	9	14	26	4	3.2	6	3	3	○
	P3	PUMR3.0G											△
	P4	PUMS3.0G											△
3M0.6	P2	PUMQ3.0H	5P	46	9	14	26	4	3.2	6	3	3	△

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

SU+PO/SU-PO Spiral Pointed Taps for Stainless Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M3.5 × 0.6	P2	PUMQ3.5H	5P	52	11	16	29	5	4	7	3	3	○
	P2	PUMQ4.0I											◎
M4 × 0.7	P3	PUMR4.0I	5P	52	11	17	29	5	4	7	3	3	△
	P4	PUMS4.0I											△
4M0.75	P2	PUMQ4.0J	5P	52	11	17	29	5	4	7	3	3	△
M5 × 0.8	P2	PUMQ5.0K	5P	60	13	22	33	5.5	4.5	7	3	3	◎
	P3	PUMR5.0K											△
	P4	PUMS5.0K											△
5M0.9	P2	PUMQ5.0L	5P	60	13	22	33	5.5	4.5	7	3	3	△
M6 × 1	P2	PUMQ6.0M	5P	62	15	26	33	6	4.5	7	3	3	◎
	P3	PUMR6.0M											△
	P4	PUMS6.0M											△
M6 × 0.75	P2	PUMQ6.0J	5P	62	15	26	33	6	4.5	7	3	3	△
M7 × 1	P2	PUMQ7.0M	5P	70	19	-	36	6.2	5	8	3	4	△
M8 × 1.25	P3	PUMR8.0N	5P	70	19	-	36	6.2	5	8	3	4	◎
	P4	PUMS8.0N											△
	P5	PUMT8.0N											△
M8 × 1	P3	PUMR8.0M	5P	70	19	-	36	6.2	5	8	3	4	○
M10 × 1.5	P3	PUMR0100	5P	75	23	-	38	7	5.5	8	3	4	◎
	P4	PUMS0100											△
M10 × 1.25	P3	PUMR010N	5P	75	23	-	38	7	5.5	8	3	4	○
	P4	PUMS010N											△
M10 × 1	P3	PUMR010M	5P	75	23	-	38	7	5.5	8	3	4	△
M12 × 1.75	P4	PUMS012P	5P	82	26	-	42	8.5	6.5	9	3	4	◎
	P5	PUMT012P											△
M12 × 1.5	P3	PUMR0120	5P	82	26	-	42	8.5	6.5	9	3	4	△
	P5	PUMT0120											
M12 × 1.25	P4	PUMS012N	5P	82	26	-	42	8.5	6.5	9	3	4	○
	P5	PUMT012N											△
M12 × 1	P3	PUMR012M	5P	82	26	-	42	8.5	6.5	9	3	4	△
M14 × 2	P4	PUMS014Q	5P	88	26	-	45	10.5	8	11	3	4	○
	P5	PUMT014Q											△
M14 × 1.5	P3	PUMR0140	5P	88	26	-	45	10.5	8	11	3	4	○
M16 × 2	P4	PUMS016Q	5P	95	26	-	48	12.5	10	13	3	4	○
	P5	PUMT016Q											△
	P6	PUMU016Q											△
M16 × 1.5	P3	PUMR0160	5P	95	26	-	48	12.5	10	13	3	4	○
M16 × 1	P3	PUMR016M	5P	95	26	-	48	12.5	10	13	3	4	△
M18 × 2.5	P4	PUMS018R	5P	100	33	-	51	14	11	14	3	4	△
	P5	PUMT018R											
	P6	PUMU018R											△
M18 × 1.5	P4	PUMS0180	5P	100	33	-	51	14	11	14	3	4	△
M20 × 2.5	P4	PUMS020R	5P	105	33	-	50	15	12	15	3	5	○
	P5	PUMT020R											△
	P6	PUMU020R											△
M20 × 1.5	P4	PUMS0200	5P	105	33	-	50	15	12	15	3	5	△
M22 × 2.5	P4	PUMS022R	5P	115	33	-	55	17	13	16	3	5	△
	P5	PUMT022R											
	P6	PUMU022R											△

Spiral Pointed Taps (for blind hole)
 Spiral Fluted Taps (for through hole)
 Spiral Fluted Taps (for through hole)
 Spiral Pointed Taps (for through hole)
 Hand Taps
 Cemented Carbide Taps
 Roll Taps
 Special Thread Taps Simple Inspection Tools
 Pipe Taps
 Thread Mills
 Dies
 Center Drills
 Centering Tools

SU+PO/SU-PO Spiral Pointed Taps for Stainless Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M22 × 1.5	P4	PUMS0220	5P	115	33	-	55	17	13	16	3	5	△
M24 × 3	P4	PUMS024S	5P	120	39	-	55	19	15	18	3	5	○
	P5	PUMT024S											△
	P6	PUMU024S											
M24 × 1.5	P4	PUMS0240	5P	120	39	-	55	19	15	18	3	5	△
M27 × 3	P4	PUMS027S	5P	130	39	-	60	20	15	18	4	5	△
M27 × 1.5	P4	PUMS0270	5P	130	39	-	60	20	15	18	4	5	△
M30 × 3.5	P5	PUMT030T	5P	135	46	-	62	23	17	20	4	5	△
M30 × 1.5	P4	PUMS0300	5P	135	46	-	62	23	17	20	4	5	△
M33 × 3.5	P5	PUMT033T	5P	145	46	-	67	25	19	22	4	5	△
M36 × 4	P5	PUMT036U	5P	155	52	-	71	28	21	24	4	5	△
M39 × 4	P5	PUMT039U	5P	165	52	-	76	30	23	26	4	5	△
M42 × 4.5	P5	PUMT042V	5P	175	59	-	81	32	26	30	4	5	△
For Unified Threads													
No.2-56UNC	P1	PUMPUN2E	5P	42	8.1	12	27	3	2.5	5	2	3	△
No.4-40UNC	P2	PUMQUN4H	5P	46	9	14	26	4	3.2	6	2	3	△
No.4-48UNF	P1	PUMPUN4F	5P	46	9	14	26	4	3.2	6	2	3	△
No.5-40UNC	P2	PUMQUN5H	5P	52	11	16	29	5	4	7	3	3	△
No.5-44UNF	P1	PUMPUN5G	5P	52	11	16	29	5	4	7	3	3	△
No.6-32UNC	P2	PUMQUN6J	5P	52	11	16	29	5	4	7	3	3	△
No.6-40UNF	P2	PUMQUN6H	5P	52	11	16	29	5	4	7	3	3	△
No.8-32UNC	P2	PUMQUN8J	5P	60	13	21	33	5.5	4.5	7	3	3	△
No.8-36UNF	P2	PUMQUN8I	5P	60	13	21	33	5.5	4.5	7	3	3	△
No.10-24UNC	P2	PUMQUNAM	5P	60	13	22	33	5.5	4.5	7	3	3	△
No.10-32UNF	P2	PUMQUNAJ	5P	60	13	22	33	5.5	4.5	7	3	3	△
1/4-20UNC	P2	PUMQU04N	5P	62	15	26	33	6	4.5	7	3	3	△
1/4-28UNF	P2	PUMQU04K	5P	62	15	26	33	6	4.5	7	3	3	△
5/16-18UNC	P3	PUMRU050	5P	70	19	-	36	6.2	5	8	3	4	△
5/16-24UNF	P2	PUMQU05M	5P	70	19	-	36	6.2	5	8	3	4	△
3/8-16UNC	P3	PUMRU06P	5P	75	23	-	38	7	5.5	8	3	4	△
3/8-24UNF	P2	PUMQU06M	5P	75	23	-	38	7	5.5	8	3	4	△
7/16-14UNC	P3	PUMRU07Q	5P	82	26	-	42	8.5	6.5	9	3	4	△
7/16-20UNF	P3	PUMRU07N	5P	82	26	-	42	8.5	6.5	9	3	4	△
1/2-13UNC	P3	PUMRU08R	5P	88	26	-	45	10.5	8	11	3	4	△
1/2-20UNF	P3	PUMRU08N	5P	88	26	-	45	10.5	8	11	3	4	△
9/16-18UNF	P3	PUMRU090	5P	95	26	-	48	12.5	10	13	3	4	△
5/8-11UNC	P3	PUMRU10U	5P	95	26	-	48	12.5	10	13	3	4	△
For Whitworth Threads													
3/16W24	P2	PUMQW03M	5P	60	13	21	33	5.5	4.5	7	3	3	△
1/4W20	P3	PUMRW04N	5P	62	15	26	33	6	4.5	7	3	3	△
5/16W18	P3	PUMRW050	5P	70	19	-	36	6.2	5	8	3	4	△
3/8W16	P3	PUMRW06P	5P	75	23	-	38	7	5.5	8	3	4	△
7/16W14	P3	PUMRW07Q	5P	82	26	-	42	8.5	6.5	9	3	4	△
1/2W12	P3	PUMRW08S	5P	88	26	-	45	10.5	8	11	3	4	△
5/8W11	P3	PUMRW10U	5P	95	26	-	48	12.5	10	13	3	4	△
3/4W10	P4	PUMSW12V	5P	105	33	-	50	15	12	15	3	5	△

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

LS-SU-S-PO

Long Shank Short Spiral Pointed Taps for Stainless Steels

Specification

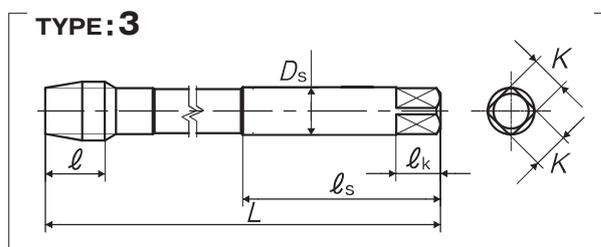
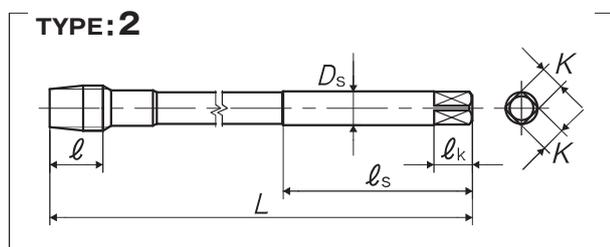
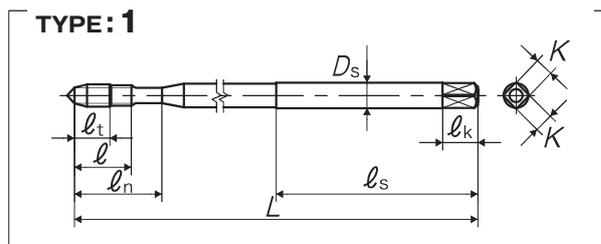


■ Long shank spiral pointed tap suitable for stainless steels tending to work harden and sticky, as well as chrome steels and molybdenum steels. Through hole use. Tapping of rather deep holes is possible.

Recommended Tapping Speeds depending on Materials

Low carbon steels 低碳素鋼	Medium carbon steels 中炭素鋼	Stainless steels ステンレス鋼
5~10 (m/min)	5~10 (m/min)	~5 (m/min)

For icon explanation, refer to P.24



Segment : 1E

Size	Class	Code	Chamfer	L (mm)	lt (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
For Metric Threads														
M3 × 0.5	P2	-	4.5P	100	5	9	14	40	4	3.2	6	3	1	△
M4 × 0.7	P2	-	4.5P	100	7	11	17	40	5	4	7	3	1	△
				150										
M5 × 0.8	P2	-	4.5P	100	9	13	22	40	5.5	4.5	7	3	1	△
				150										
M6 × 1	P2	-	4.5P	100	11	15	26	40	6	4.5	7	3	1	△
				150										
M8 × 1.25	P3	-	5P	100	-	12	-	50	6.2	5	8	3	2	△
				150										
M10 × 1.5	P3	-	5P	100	-	13	-	50	7	5.5	8	3	2	△
				150										
M12 × 1.75	P4	-	5P	150	-	15	-	50	8.5	6.5	9	3	2	△
M16 × 2	P4	-	5P	150	-	18	-	60	12.5	10	13	3	2	△
M20 × 2.5	P4	-	5P	150	-	20	-	70	15	12	15	3	3	△

Spiral Fluted Taps
(for blind hole)

Spiral Fluted Taps
(for through hole)

Spiral Pointed Taps
(for through hole)

Hand Taps

Cemented
Carbide Taps

Roll Taps

Special Thread Taps
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools

S-PO

Short Spiral Pointed Taps for Deep Hole Use Specification

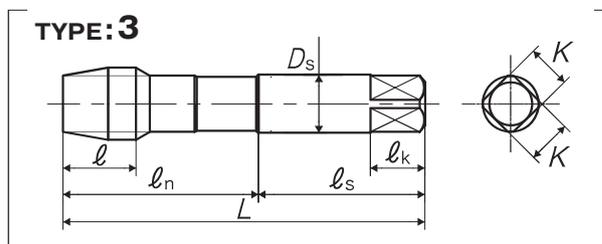
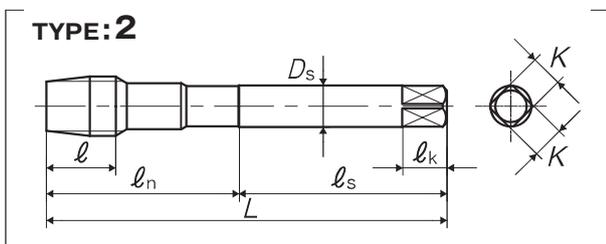
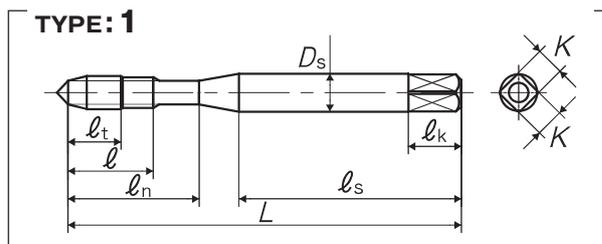


■S-PO is the spiral pointed tap having short thread portion which reduces friction and makes smooth the coolant supply, and is suitable for such deep holes as are deeper than 2.5 times of the nominal dia.

Recommended Tapping Speeds depending on Materials

Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼
5~10 (m/min)	5~10 (m/min)

For icon explanation, refer to P.24



Segment : 1E

Size	Class	Code	Chamfer	L (mm)	lt (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
For Metric Threads														
M2 × 0.4	P2	PSMQ2.0E	5P	42	4	7.2	12	27	3	2.5	5	2	1	○
M2.3 × 0.4	P2	PSMQ2.3E	5P	42	4	7.2	12	27	3	2.5	5	2	1	△
M2.5 × 0.45	P2	PSMQ2.5F	5P	46	4	8.1	14	29	3	2.5	5	2	1	△
M2.6 × 0.45	P2	PSMQ2.6F	5P	46	4	8.1	14	29	3	2.5	5	2	1	△
M3 × 0.5	P2	PSMQ3.0G	5P	46	5	9	14	26	4	3.2	6	3	1	○
M3.5 × 0.6	P2	PSMQ3.5H	5P	52	7	11	16	29	5	4	7	3	1	△
M4 × 0.7	P2	PSMQ4.0I	5P	52	7	11	17	29	5	4	7	3	1	○
M5 × 0.8	P2	PSMQ5.0K	5P	60	9	13	22	33	5.5	4.5	7	3	1	○
M6 × 1	P2	PSMQ6.0M	5P	62	11	15	26	33	6	4.5	7	3	1	○
M8 × 1.25	P3	PSMR8.0N	5P	70	-	12	-	36	6.2	5	8	3	2	○
M8 × 1	P3	PSMR8.0M	5P	70	-	12	-	36	6.2	5	8	3	2	△
M10 × 1.5	P3	PSMR0100	5P	75	-	13	-	38	7	5.5	8	3	2	○
M10 × 1.25	P3	PSMR010N	5P	75	-	13	-	38	7	5.5	8	3	2	△
M10 × 1	P3	PSMR010M	5P	75	-	13	-	38	7	5.5	8	3	2	○
M12 × 1.75	P4	PSMS012P	5P	82	-	15	-	42	8.5	6.5	9	3	2	○
M12 × 1.5	P3	PSMR0120	5P	82	-	15	-	42	8.5	6.5	9	3	2	△
M12 × 1.25	P4	PSMS012N	5P	82	-	15	-	42	8.5	6.5	9	3	2	○
M12 × 1	P3	PSMR012M	5P	82	-	15	-	42	8.5	6.5	9	3	2	△
M14 × 2	P4	PSMS014Q	5P	88	-	18	-	45	10.5	8	11	3	2	○
M14 × 1.5	P3	PSMR0140	5P	88	-	14	-	45	10.5	8	11	3	2	○
M16 × 2	P4	PSMS016Q	5P	95	-	18	-	48	12.5	10	13	3	2	○
M16 × 1.5	P3	PSMR0160	5P	95	-	14	-	48	12.5	10	13	3	2	△
M18 × 2.5	P4	PSMS018R	5P	100	-	20	-	51	14	11	14	3	2	△

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

S-PO Short Spiral Pointed Taps for Deep Hole Use

Size	Class	Code	Chamfer	L (mm)	lt (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
M18 × 1.5	P4	PSMS0180	5P	100	-	14	-	51	14	11	14	3	2	△
M20 × 2.5	P4	PSMS020R	5P	105	-	20	-	50	15	12	15	3	3	○
M20 × 1.5	P4	PSMS0200	5P	105	-	14	-	50	15	12	15	3	3	△
M22 × 2.5	P4	PSMS022R	5P	115	-	20	-	55	17	13	16	3	3	△
M22 × 1.5	P4	PSMS0220	5P	115	-	14	-	55	17	13	16	3	3	△
M24 × 3	P4	PSMS024S	5P	120	-	25	-	55	19	15	18	3	3	△
M24 × 1.5	P4	PSMS0240	5P	120	-	18	-	55	19	15	18	3	3	△
M27 × 3	P4	PSMS027S	5P	130	-	25	-	60	20	15	18	4	3	△
M27 × 1.5	P4	PSMS0270	5P	130	-	20	-	60	20	15	18	4	3	△
M30 × 3.5	P5	PSMT030T	5P	135	-	30	-	62	23	17	20	4	3	△
M30 × 1.5	P4	PSMS0300	5P	135	-	20	-	62	23	17	20	4	3	△
M33 × 3.5	P5	PSMT033T	5P	145	-	30	-	67	25	19	22	4	3	△
M36 × 4	P5	PSMT036U	5P	155	-	40	-	71	28	21	24	4	3	△
M39 × 4	P5	PSMT039U	5P	165	-	40	-	76	30	23	26	4	3	△
M42 × 4.5	P5	PSMT042V	5P	175	-	40	-	81	32	26	30	4	3	△

Spiral Fluted Taps
(for blind hole)

Spiral Fluted Taps
(for through hole)

Spiral Pointed Taps
(for through hole)

Hand Taps

Cemented Carbide Taps

Roll Taps

Special Thread Taps
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools

HC+PO/HC-PO

Spiral Pointed Taps for High Carbon Steels
Specification



■Spiral pointed tap suitable for high carbon steels such as S55C and the like.

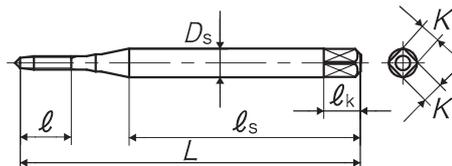
HC+PO	~ M2.6
HC-PO	M3~

Recommended Tapping Speeds depending on Materials

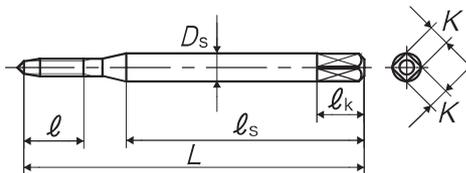
High carbon steels
高炭素鋼
5~10
(m/min)

For icon explanation, refer to P.24

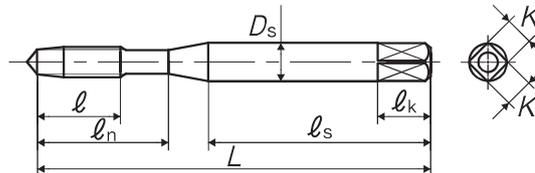
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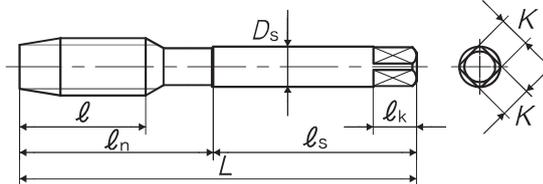
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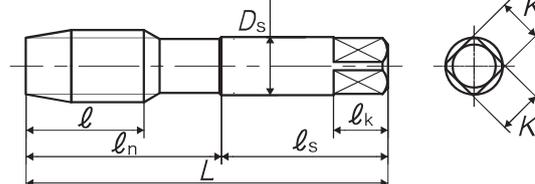
TYPE: 3



TYPE: 4



TYPE: 5



Segment : 1E

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
For Metric Threads													
M1.4 × 0.3	P1	PCPP1.4C	5P	36	5.4	-	24	3	2.5	5	2	1	○
M1.6 × 0.35	P2	PCPQ1.6D	5P	36	6.3	-	24	3	2.5	5	2	2	○
M1.7 × 0.35	P2	PCPQ1.7D	5P	36	6.3	-	24	3	2.5	5	2	2	○
M2 × 0.4	P2	PCPQ2.0E	5P	42	7.2	12	27	3	2.5	5	2	3	○
M2.5 × 0.45	P2	PCPQ2.5F	5P	46	8.1	14	29	3	2.5	5	2	3	○
M2.6 × 0.45	P2	PCPQ2.6F	5P	46	8.1	14	29	3	2.5	5	2	3	○
M3 × 0.5	P2	PCMQ3.0G	5P	46	9	14	26	4	3.2	6	3	3	○
M4 × 0.7	P2	PCMQ4.0I	5P	52	11	17	29	5	4	7	3	3	○
M5 × 0.8	P2	PCMQ5.0K	5P	60	13	22	33	5.5	4.5	7	3	3	○
M6 × 1	P2	PCMQ6.0M	5P	62	15	26	33	6	4.5	7	3	3	○
M8 × 1.25	P3	PCMR8.0N	5P	70	19	-	36	6.2	5	8	3	4	○
M10 × 1.5	P3	PCMR0100	5P	75	23	-	38	7	5.5	8	3	4	○
M10 × 1.25	P3	PCMR010N	5P	75	23	-	38	7	5.5	8	3	4	△
M12 × 1.75	P4	PCMS012P	5P	82	26	-	42	8.5	6.5	9	3	4	○
M12 × 1.5	P3	PCMR0120	5P	82	26	-	42	8.5	6.5	9	3	4	△

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

HC+PO/HC-PO Spiral Pointed Taps for High Carbon Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M12 × 1.25	P4	PCMS012N	5P	82	26	-	42	8.5	6.5	9	3	4	△
M14 × 2	P4	PCMS014Q	5P	88	26	-	45	10.5	8	11	3	4	△
M14 × 1.5	P3	PCMR014O	5P	88	26	-	45	10.5	8	11	3	4	△
M16 × 2	P4	PCMS016Q	5P	95	26	-	48	12.5	10	13	3	4	△
M16 × 1.5	P3	PCMR016O	5P	95	26	-	48	12.5	10	13	3	4	△
M18 × 2.5	P4	PCMS018R	5P	100	33	-	51	14	11	14	3	4	△
M18 × 1.5	P4	PCMS018O	5P	100	33	-	51	14	11	14	3	4	△
M20 × 2.5	P4	PCMS020R	5P	105	33	-	50	15	12	15	3	5	△
M20 × 1.5	P4	PCMS020O	5P	105	33	-	50	15	12	15	3	5	△
M22 × 2.5	P4	PCMS022R	5P	115	33	-	55	17	13	16	3	5	△
M24 × 3	P4	PCMS024S	5P	120	39	-	55	19	15	18	3	5	△

Spiral Fluted Taps
(for blind hole)

Spiral Fluted Taps
(for through hole)

Spiral Pointed Taps
(for through hole)

Hand Taps

Cemented
Carbide Taps

Roll Taps

Special Thread Taps
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools

AL-PO



Spiral Pointed Taps for Helical Coil Wire Screw Thread Inserts

Specification

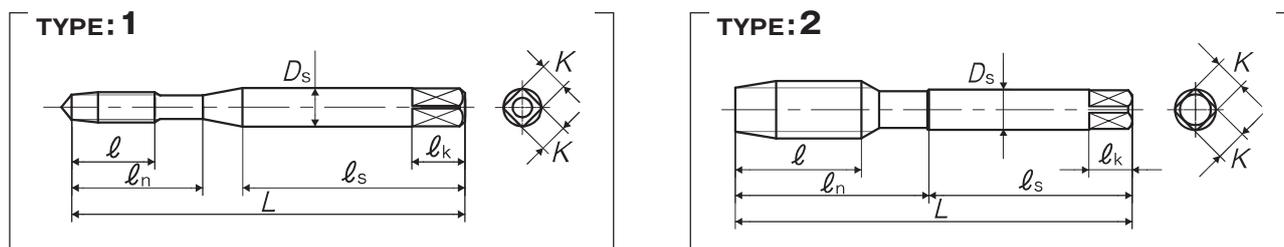


■ Spiral pointed tap to cut internal threads for helical coil to enter.

Recommended Tapping Speeds depending on Materials

Brass 黄銅	Brass castings 黄銅鑄物	Bronze 青銅	Wrought aluminum アルミ圧延材	Aluminum alloy castings アルミ合金鑄物	Magnesium alloy die castings マグネシウム合金鑄物	Zinc alloy castings 亜鉛合金鑄物
5~15 (m/min)	5~15 (m/min)	5~15 (m/min)	5~15 (m/min)	5~15 (m/min)	5~15 (m/min)	5~15 (m/min)

For icon explanation, refer to P.24



Segment : 1E

Size	Class	Code	Chamfer	Basic major dia	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
For Helical Coil Wire Screw Thread Inserts, for Metric Threads														
STI M3 × 0.5	1b	-	5P	3.65	52	7.5	17	29	5	4	7	3	1	△
STI M4 × 0.7	1b	-	5P	4.909	60	13	22	33	5.5	4.5	7	3	1	△
STI M5 × 0.8	1b	-	5P	6.039	62	15	26	33	6	4.5	7	3	1	△
STI M6 × 1	1b	-	5P	7.299	70	19	-	36	6.2	5	8	3	2	△
STI M8 × 1.25	1b	-	5P	9.624	75	23	-	38	7	5.5	8	3	2	△
STI M10 × 1.5	1b	-	5P	11.948	82	26	-	42	8.5	6.5	9	3	2	△
STI M12 × 1.75	1b	-	5P	14.273	95	26	-	48	12.5	10	13	3	2	△

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



MC-PO

Spiral Pointed Taps with Internal Coolant Specification

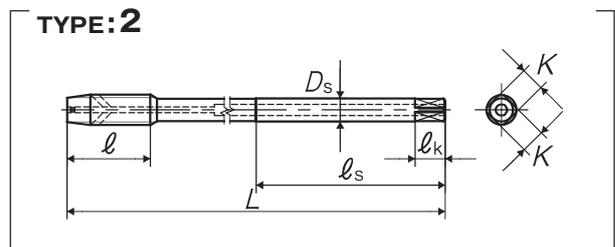
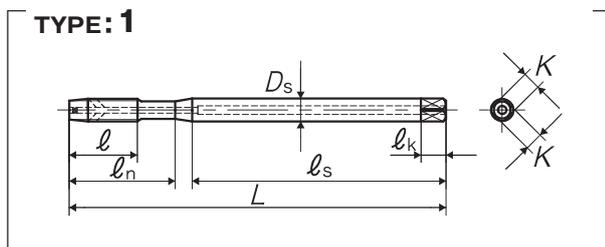


■ Adopting internal coolant (radial through type) realizing sufficient coolant supply to the cutting area, MC-PO spiral pointed tap ensures a long tool life and internal threads with good surface finish.

Recommended Tapping Speeds depending on Materials

Medium carbon steels
中炭素鋼
5~10
(m/min)

For icon explanation, refer to P.24



Segment : 1E

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
For Metric Threads													
M6 × 1	P2	MPHQ6.0ML10	5P	100	19	28	40	6	4.5	7	3	1	△
		MPHQ6.0ML15		150									
M8 × 1.25	P3	MPHR8.0NL10	5P	100	22	-	50	6.2	5	8	3	2	△
		MPHR8.0NL15		150									
M10 × 1.5	P3	MPHR0100L10	5P	100	24	-	50	7	5.5	8	3	2	△
		MPHR0100L15		150									
M10 × 1.25	P3	MPHR010NL15	5P	150	24	-	50	7	5.5	8	3	2	△
M12 × 1.75	P4	MPHS012PL10	5P	100	29	-	50	8.5	6.5	9	3	2	△
		MPHS012PL15		150									
M12 × 1.5	P3	MPHR0120L10	5P	100	29	-	50	8.5	6.5	9	3	2	△
		MPHR0120L15		150									
M12 × 1.25	P4	MPHS012NL10	5P	100	29	-	50	8.5	6.5	9	3	2	△
		MPHS012NL15		150									
M14 × 2	P4	MPHS014QL15	5P	150	30	-	60	10.5	8	11	3	2	△
M14 × 1.5	P3	MPHR0140L15	5P	150	30	-	60	10.5	8	11	3	2	△
M16 × 2	P4	MPHS016QL15	5P	150	32	-	60	12.5	10	13	3	2	△
M16 × 1.5	P3	MPHR0160L15	5P	150	32	-	60	12.5	10	13	3	2	△
M18 × 2.5	P4	MPHS018RL15	5P	150	37	-	70	14	11	14	3	2	△
M18 × 1.5	P4	MPHS0180L15	5P	150	37	-	70	14	11	14	3	2	△
M20 × 2.5	P4	MPHS020RL15	5P	150	37	-	70	15	12	15	3	2	△
M20 × 1.5	P4	MPHS0200L15	5P	150	37	-	70	15	12	15	3	2	△
M22 × 2.5	P4	MPHS022RL15	5P	150	38	-	70	17	13	16	3	2	△
M24 × 3	P4	MPHS024SL15	5P	150	45	-	80	19	15	18	3	2	△

Spiral Fluted Taps (for blind hole)
Spiral Fluted Taps (for through hole)
Spiral Pointed Taps (for through hole)
Hand Taps
Cemented Carbide Taps
Roll Taps
Special Thread Taps (Simple Inspection Tools)
Pipe Taps
Thread Mills
Dies
Center Drills
Centering Tools

EH-PO

Spiral Pointed Taps for Hard-to-Machine Materials

Specification



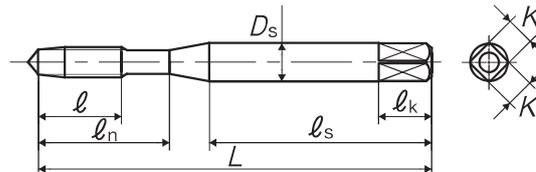
■Spiral pointed tap suitable for high hardness steels of 25~35HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and die steels. Through hole use.

Recommended Tapping Speeds depending on Materials

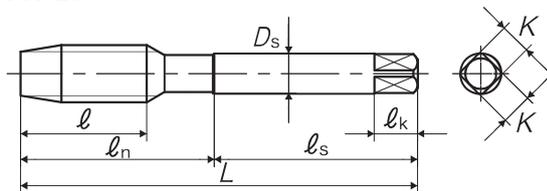
Thermal refined steels
調質鋼
~5
(m/min)
25~35HRC

For icon explanation, refer to P.24

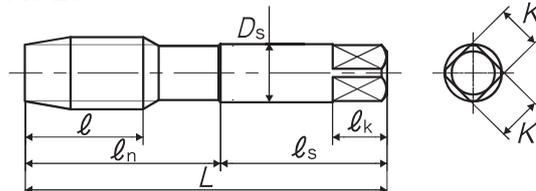
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1E

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
For Metric Threads													
M3 × 0.5	P3	EPHMR3.0G	4.5P	46	9	14	26	4	3.2	6	3	1	○
M4 × 0.7	P3	EPHMR4.0I	4.5P	52	11	17	29	5	4	7	3	1	○
M5 × 0.8	P3	EPHMR5.0K	4.5P	60	13	22	33	5.5	4.5	7	3	1	○
M6 × 1	P3	EPHMR6.0M	4.5P	62	15	26	33	6	4.5	7	3	1	○
M8 × 1.25	P4	EPHMS8.0N	4.5P	70	19	-	36	6.2	5	8	3	2	○
M10 × 1.5	P4	EPHMS0100	4.5P	75	23	-	38	7	5.5	8	3	2	○
M10 × 1.25	P4	EPHMS010N	4.5P	75	23	-	38	7	5.5	8	3	2	○
M12 × 1.75	P4	EPHMS012P	4.5P	82	26	-	42	8.5	6.5	9	3	2	○
M12 × 1.5	P4	EPHMS0120	4.5P	82	26	-	42	8.5	6.5	9	3	2	△
M12 × 1.25	P4	EPHMS012N	4.5P	82	26	-	42	8.5	6.5	9	3	2	△
M14 × 2	P5	EPHMT014Q	4.5P	88	26	-	45	10.5	8	11	3	2	△
M14 × 1.5	P4	EPHMS0140	4.5P	88	26	-	45	10.5	8	11	3	2	○
M16 × 2	P5	EPHMT016Q	4.5P	95	26	-	48	12.5	10	13	3	2	○
M16 × 1.5	P4	EPHMS0160	4.5P	95	26	-	48	12.5	10	13	3	2	△
M18 × 2.5	P5	EPHMT018R	4.5P	100	33	-	51	14	11	14	3	2	△
M18 × 1.5	P4	EPHMS0180	4.5P	100	33	-	51	14	11	14	3	2	△
M20 × 2.5	P5	EPHMT020R	4.5P	105	33	-	50	15	12	15	3	3	△
M20 × 1.5	P4	EPHMS0200	4.5P	105	33	-	50	15	12	15	3	3	△
M22 × 2.5	P5	EPHMT022R	4.5P	115	33	-	55	17	13	16	3	3	△
M22 × 1.5	P4	EPHMS0220	4.5P	115	33	-	55	17	13	16	3	3	△
M24 × 3	P5	EPHMT024S	4.5P	120	39	-	55	19	15	18	3	3	△
M24 × 1.5	P4	EPHMS0240	4.5P	120	39	-	55	19	15	18	3	3	△

ZEN-P

Spiral Pointed Taps for Nickel Base Alloys Specification



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

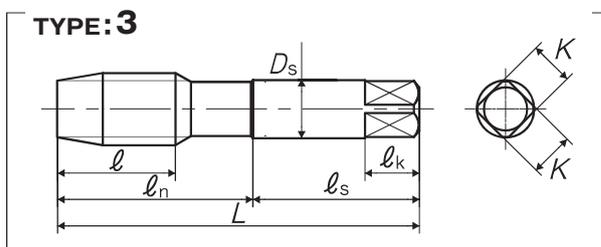
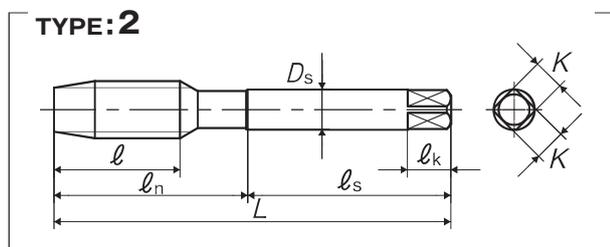
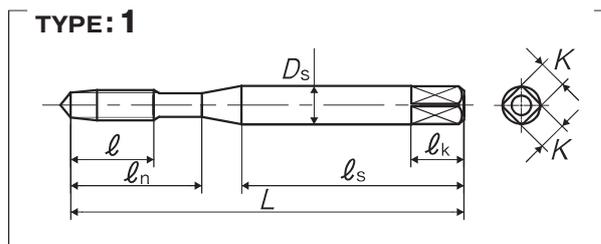


■ZEN-P is the spiral point tap for nickel base alloys which, with nickel as main composition, have much higher corrosion resistance and much higher heat resistance than steels.

Recommended Tapping Speeds depending on Materials

Nickel base alloys
ニッケル基合金
5~10
(m/min)

For icon explanation, refer to P.24



Segment : 1F

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	Stock
For Metric Threads													
M3 × 0.5	P3	ZENPMR3.0G	4.5P	46	9	14	26	4	3.2	6	3	1	○
M4 × 0.7	P3	ZENPMR4.0I	4.5P	52	11	17	29	5	4	7	3	1	○
M5 × 0.8	P3	ZENPMR5.0K	4.5P	60	13	22	33	5.5	4.5	7	3	1	○
M6 × 1	P3	ZENPMR6.0M	4.5P	62	15	26	33	6	4.5	7	3	1	○
M8 × 1.25	P4	ZENPMS8.0N	4.5P	70	19	-	36	6.2	5	8	3	2	○
M10 × 1.5	P4	ZENPMS0100	4.5P	75	23	-	38	7	5.5	8	3	2	○
M10 × 1.25	P4	ZENPMS010N	4.5P	75	23	-	38	7	5.5	8	3	2	△
M12 × 1.75	P5	ZENPMT012P	4.5P	82	26	-	42	8.5	6.5	9	3	2	○
M12 × 1.5	P4	ZENPMS0120	4.5P	82	26	-	42	8.5	6.5	9	3	2	△
M12 × 1.25	P5	ZENPMT012N	4.5P	82	26	-	42	8.5	6.5	9	3	2	△
M14 × 2	P5	ZENPMT014Q	4.5P	88	26	-	45	10.5	8	11	3	2	△
M14 × 1.5	P4	ZENPMS0140	4.5P	88	26	-	45	10.5	8	11	3	2	△
M16 × 2	P5	ZENPMT016Q	4.5P	95	26	-	48	12.5	10	13	3	2	△
M16 × 1.5	P4	ZENPMS0160	4.5P	95	26	-	48	12.5	10	13	3	2	△
M18 × 2.5	P5	ZENPMT018R	4.5P	100	33	-	51	14	11	14	3	2	△
M20 × 2.5	P5	ZENPMT020R	4.5P	105	33	-	50	15	12	15	3	3	△
M20 × 1.5	P5	ZENPMT0200	4.5P	105	33	-	50	15	12	15	3	3	△

Spiral Fluted Taps
(for blind hole)

Spiral Fluted Taps
(for through hole)

Spiral Pointed Taps
(for through hole)

Hand Taps

Cemented
Carbide Taps

Roll Taps

Special Thread Taps
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools

PM-PO

Spiral Pointed Taps for Hard-to-Machine Materials

Specification



■Spiral pointed tap suitable for high hardness steels of 35~45HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and die steel. Through hole use.

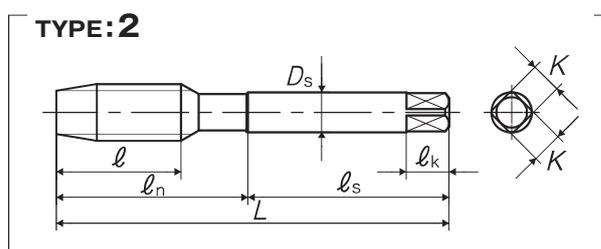
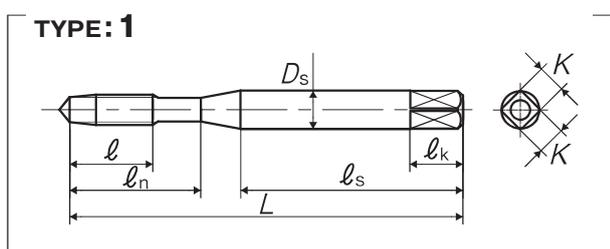


Recommended Tapping Speeds depending on Materials



35~45HRC

For icon explanation, refer to P.24



Segment : 1E

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
For Metric Threads													
M3 × 0.5	P3	-	5.5P	46	9	14	26	4	3.2	6	3	1	△
M4 × 0.7	P3	-	5.5P	52	11	17	29	5	4	7	3	1	△
M5 × 0.8	P3	-	5.5P	60	13	22	33	5.5	4.5	7	3	1	△
M6 × 1	P3	-	5.5P	62	15	26	33	6	4.5	7	3	1	△
M8 × 1.25	P4	-	5.5P	70	19	-	36	6.2	5	8	3	2	△
M10 × 1.5	P4	-	5.5P	75	23	-	38	7	5.5	8	3	2	△
M10 × 1.25	P4	-	5.5P	75	23	-	38	7	5.5	8	3	2	△
M12 × 1.75	P4	-	5.5P	82	26	-	42	8.5	6.5	9	3	2	△

Spiral Fluted Taps (for blind hole)
Spiral Fluted Taps (for through hole)
Spiral Pointed Taps (for through hole)
Hand Taps
Cemented Carbide Taps
Roll Taps
Special Thread Taps Simple inspection tools
Pipe Taps
Thread Mills
Dies
Center Drills
Centering Tools

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

LS-PM-PO



Long Shank Spiral Pointed Taps for Hard-to-Machine Materials

Specification

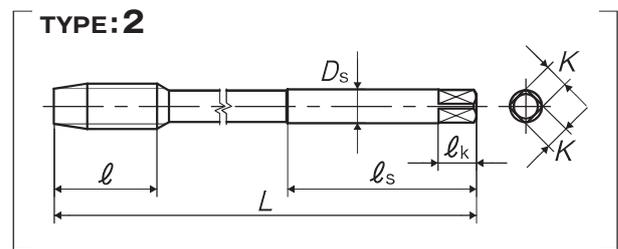
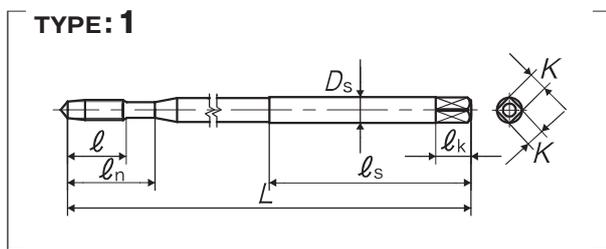


■ Long shank spiral pointed tap suitable for high hardness steels of 35~45HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and die steel. Through hole use.

Recommended Tapping Speeds depending on Materials

Thermal refined steels
調質鋼
~5
(m/min)
35~45HRC

For icon explanation, refer to P.24



Segment : 1E

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	Stock
For Metric Threads													
M4 × 0.7	P3	-	5.5P	100	11	17	40	5	4	7	3	1	△
M5 × 0.8	P3	-	5.5P	100	13	22	40	5.5	4.5	7	3	1	△
M6 × 1	P3	-	5.5P	100	15	26	40	6	4.5	7	3	1	△
M8 × 1.25	P4	-	5.5P	100	19	-	50	6.2	5	8	3	2	△

Spiral Fluted Taps (for blind hole)
Spiral Fluted Taps (for through hole)
Spiral Pointed Taps (for through hole)
Hand Taps
Cemented Carbide Taps
Roll Taps
Special Thread Taps Simple Inspection Tools
Pipe Taps
Thread Mills
Dies
Center Drills
Centering Tools