

SPIRAL FLUTED TAP SERIES FOR BLIND HOLE



ISP	SP-1	E-SP	SP-45
SP	SP-3	HC+SP/HC-SP	SP-47
SP 1.5P	SP-11	HC+SP OX/HC-SP OX	SP-49
+SP	SP-13	AL+SP/AL-SP	SP-51
XSP	SP-15	AL-SP 1.5P	SP-54
SP OX	SP-16	LO-SP	SP-55
+SP OX	SP-19	LS-LO-SP	SP-56
SP LH	SP-20	MC-SP	SP-57
SP V	SP-22	ZET-B	SP-58
AU+SP	SP-23	ZEN-B	SP-59
AUXSP	SP-25	PM-SP	SP-60
LS-SP	SP-26	LS-PM-SP	SP-61
LS-SP LH	SP-30	F-SP	SP-62
LS-SP V	SP-31	LS-F-SP	SP-63
LS-SP-K	SP-32	HFIHS	SP-64
SU+SP/SU-SP	SP-33	HFISP	SP-65
SUXSP	SP-38	HFAHS	SP-66
SU2-SP	SP-39	HFASP	SP-67
SU-S-SP	SP-41	HDISP	SP-68
LS-SU-S-SP	SP-42	HDASP	SP-69
S-SP	SP-43		

ISP

Spiral Fluted Taps for General Purpose Specification



Recommended Tapping Speeds depending on Materials

Low carbon steels
低炭素鋼
~5
(m/min)

For icon explanation, refer to P.24

Product features

- ISP is the best tap for blind holes to be used on the lower cutting speed with drilling machines.
- Use for threading of 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 flutes, ISP ejects chips backward against the tapping direction and is for blind hole use.



Tapping for blind holes



How to use ISP

- 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]

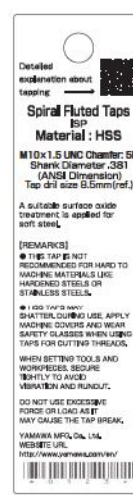
Shank adjuster

- For deep hole tapings, 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



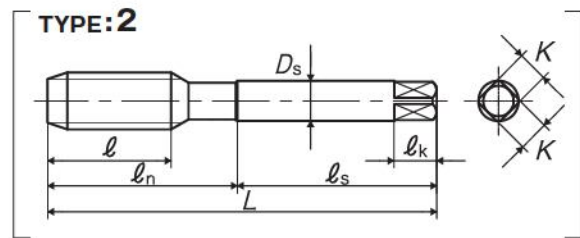
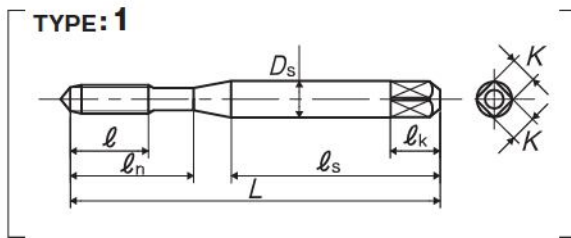
Blister Pack



Obtainable from
Video site shown in right



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



Segment : 1C

Size	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	Type	Stock
For Metric Threads												
M3 × 0.5	SI73.0G	2.5P	46	9	14	26	4	3.2	6	3	1	⊙
M4 × 0.7	SI74.0I	2.5P	52	11	17	29	5	4	7	3	1	⊙
M5 × 0.8	SI75.0K	2.5P	60	13	22	33	5.5	4.5	7	3	1	⊙
M6 × 1	SI76.0M	2.5P	62	15	26	33	6	4.5	7	3	1	⊙
M8 × 1.25	SI78.0N	2.5P	70	19	-	36	6.2	5	8	3	2	⊙
M10 × 1.5	SI70100	2.5P	75	23	-	38	7	5.5	8	3	2	⊙

Blister Pack

Size	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	Type	Stock
For Metric Threads												
M3 × 0.5	SI73.0GBP	2.5P	46	9	14	26	4	3.2	6	3	1	⊙
M4 × 0.7	SI74.0IBP	2.5P	52	11	17	29	5	4	7	3	1	⊙
M5 × 0.8	SI75.0KBP	2.5P	60	13	22	33	5.5	4.5	7	3	1	⊙
M6 × 1	SI76.0MBP	2.5P	62	15	26	33	6	4.5	7	3	1	⊙
M8 × 1.25	SI78.0NBP	2.5P	70	19	-	36	6.2	5	8	3	2	⊙
M10 × 1.5	SI70100BP	2.5P	75	23	-	38	7	5.5	8	3	2	⊙

SP

Spiral Fluted Taps Specification



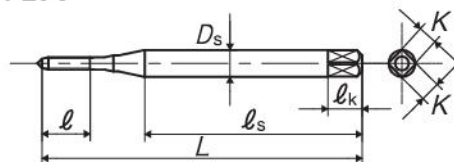
Recommended Tapping Speeds depending on Materials

Medium carbon steels
中炭鋼
5~10
(m/min)

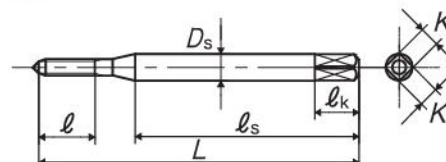
For icon explanation, refer to P.24



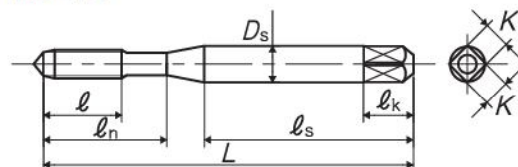
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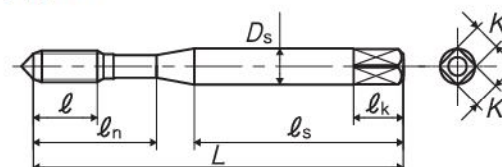
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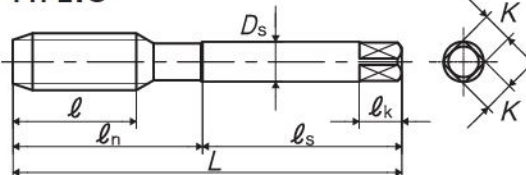
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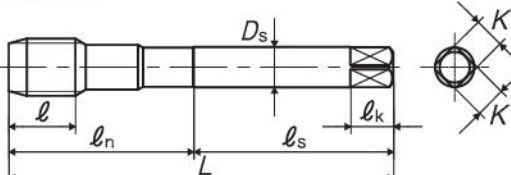
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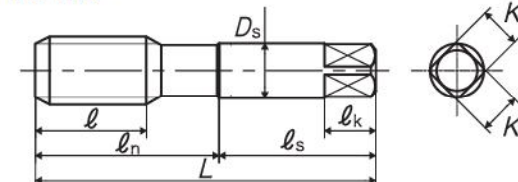
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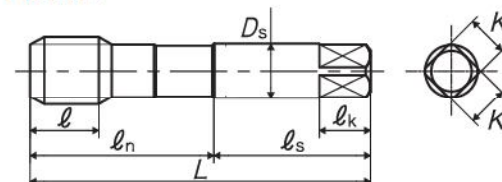
TYPE:6



TYPE:7



TYPE:8



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

SP Spiral Fluted Taps

Oversize
Segment : 1C

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	SPP1.2B	2.5P	36	4.5	-	24	3	2.5	5	2	1	○
M1.4 × 0.3	P1	SPP1.4C	2.5P	36	5.4	-	24	3	2.5	5	2	1	◎
M1.6 × 0.35	P1	SPP1.6D	2.5P	36	6.3	-	24	3	2.5	5	2	2	◎
M1.7 × 0.35	P1	SPP1.7D	2.5P	36	6.3	-	24	3	2.5	5	2	2	◎
	P2	SPQ1.7D											○
	P3	SPR1.7D											△
M1.8 × 0.35	P1	SPP1.8D	2.5P	42	6.3	-	27	3	2.5	5	2	2	△
M2 × 0.4	P1	SPP2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	3	◎
	P2	SPQ2.0E											○
	P3	SPR2.0E											◎
	P4	SPS2.0E											△
M2 × 0.25	P1	SPP2.0B	2.5P	42	4.5	12	27	3	2.5	5	2	4	○
M2.2 × 0.45	P1	SPP2.2F	2.5P	42	8.1	12	27	3	2.5	5	2	3	○
	P3	SPR2.2F											△
M2.3 × 0.4	P1	SPP2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	3	○
	P2	SPQ2.3E											△
	P3	SPR2.3E											△
	P4	SPS2.3E											△
M2.3 × 0.25	P1	SPP2.3B	2.5P	42	4.5	12	27	3	2.5	5	2	4	△
M2.5 × 0.45	P1	SPP2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	3	◎
	P2	SPQ2.5F											○
	P3	SPR2.5F											○
	P4	SPS2.5F											○
M2.5 × 0.35	P1	SPP2.5D	2.5P	46	6.3	14	29	3	2.5	5	2	4	○
M2.6 × 0.45	P1	SPP2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	3	◎
	P2	SPQ2.6F											○
	P3	SPR2.6F											△
	P4	SPS2.6F											△
M2.6 × 0.35	P1	SPP2.6D	2.5P	46	6.3	14	29	3	2.5	5	2	4	△
M3 × 0.5	P1	SPP3.0G	2.5P	46	9	14	26	4	3.2	6	3	3	◎
	P2	SPQ3.0G											○
	P3	SPR3.0G											○
	P4	SPS3.0G											○
3M0.6	P1	SPP3.0H	2.5P	46	9	14	26	4	3.2	6	3	3	△
M3 × 0.35	P1	SPP3.0D	2.5P	46	6.5	14	26	4	3.2	6	3	4	○
M3.5 × 0.6	P1	SPP3.5H	2.5P	52	11	16	29	5	4	7	3	3	○
	P2	SPQ3.5H											△
	P3	SPR3.5H											△
	P4	SPS3.5H											△
M3.5 × 0.35	P1	SPP3.5D	2.5P	52	6.5	16	29	5	4	7	3	4	△
M4 × 0.7	P2	SPQ4.0I	2.5P	52	11	17	29	5	4	7	3	3	◎
	P3	SPR4.0I											○
	P4	SPS4.0I											○
4M0.75	P2	SPQ4.0J	2.5P	52	11	17	29	5	4	7	3	3	○
M4 × 0.5	P1	SPP4.0G	2.5P	52	9	17	29	5	4	7	3	4	○
M4.5 × 0.75	P2	SPQ4.5J	2.5P	60	13	21	33	5.5	4.5	7	3	3	△
M4.5 × 0.5	P1	SPP4.5G	2.5P	60	9	21	33	5.5	4.5	7	3	4	△
M5 × 0.8	P2	SPQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	3	◎

◎=Standard ○=Semi standard △=Made to order
For improvement, spec may change without advance notice.

Think threads with
YAMAWA

Spiral Fluted Taps
(for blind hole)

Spiral Fluted Taps
(for through hole)

Spiral Fluted Taps
(for through hole)

Hand Taps
Spiral Pointed Taps
(for through hole)

Cemented
Carbide Taps

Roll Taps

Special Thread Taps
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools

SP-4

Spiral Fluted Tap Series for blind hole

SP Spiral Fluted 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	P3 P4	SPR5.0K SPS5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	3	○												
Spiral Fluted Taps (for through hole)	5M0.9	P2	SPQ5.0L	2.5P	60	13	22	33	5.5	4.5	7	3	3	△												
	M5 × 0.75	P2	SPQ5.0J	2.5P	60	13	22	33	5.5	4.5	7	3	3	△												
	M5 × 0.5	P1	SPP5.0G	2.5P	60	9	22	33	5.5	4.5	7	3	4	○												
	M5.5 × 0.9	P2	SPQ5.5L	2.5P	62	15	26	33	6	4.5	7	3	3	△												
	M5.5 × 0.5	P1	SPP5.5G	2.5P	62	9	26	33	6	4.5	7	3	4	△												
	Spiral Pointed Taps (for through hole)	M6 × 1	P2	SPQ6.0M SPQ6.0M-T	2.5P	62	15	26	33	6	4.5	7	3	3	◎											
P3			SPR6.0M	○																						
P4			SPS6.0M	○																						
Hand Taps			M6 × 0.75	P2											SPQ6.0J	2.5P	62	15	26	33	6	4.5	7	3	3	○
	P3	SPR6.0J		△																						
Cemented Carbide Taps	M6 × 0.5	P1	SPP6.0G	2.5P	62	9	26	33	6	4.5	7	3	4	○												
		P2	SPQ6.0G											△												
		P3	SPR6.0G											△												
		Roll Taps	M7 × 1											P2	SPQ7.0M	2.5P	70	19	-	36	6.2	5	8	3	5	○
	P3			SPR7.0M	△																					
	P4			SPS7.0M	△																					
Special Thread Taps Simple Inspection Tools	M7 × 0.75	P2	SPQ7.0J	2.5P	70	19	-	36	6.2	5	8	3	5	○												
	M7 × 0.5	P2	SPQ7.0G	2.5P	70	10	-	36	6.2	5	8	3	6	△												
	Pipe Taps	M8 × 1.25	P2	SPQ8.0N	2.5P	70	19	-	36	6.2	5	8	3	5	◎											
			P3	SPR8.0N											○											
			P4	SPS8.0N											○											
			Thread Mills	M8 × 1											P2	SPQ8.0M	2.5P	70	19	-	36	6.2	5	8	3	5
P3	SPR8.0M	△																								
P4	SPS8.0M	△																								
Dies	M8 × 0.75	P2	SPQ8.0J	2.5P	70	19	-	36	6.2	5	8	3	5	○												
		P3	SPR8.0J											△												
		Center Drills	M8 × 0.5											P2	SPQ8.0G	2.5P	70	10	-	36	6.2	5	8	3	6	○
														M9 × 1.25	P2											SPQ9.0N
	M9 × 1			P2	SPQ9.0M	2.5P	75	23	-	38	7	5.5	8		3											5
	Centering Tools	M9 × 0.75	P2	SPQ9.0J	2.5P	75	13	-	38	7	5.5	8	3	6	○											
M9 × 0.5		P2	SPQ9.0G	2.5P	75	11	-	38	7	5.5	8	3	6	△												
Centering Tools		M10 × 1.5	P2	SPQ0100	2.5P	75	23	-	38	7	5.5	8	3	5	◎											
			P3	SPR0100											○											
			P4	SPS0100											○											
			Centering Tools	M10 × 1.25											P2	SPQ010N	2.5P	75	23	-	38	7	5.5	8	3	5
P3	SPR010N	○																								
P4	SPS010N	○																								
Centering Tools	M10 × 1	P2	SPQ010M	2.5P	75	23	-	38	7	5.5	8	3	5	○												
		P3	SPR010M											△												
		P4	SPS010M											△												
		M10 × 0.75	P2											SPQ010J	2.5P	75	13	-	38	7	5.5	8	3	6	○	
	M10 × 0.5	P2	SPQ010G	2.5P	75	11	-	38	7	5.5	8	3	6	△												
	M11 × 1.5	P2	SPQ0110	2.5P	82	26	-	42	8.5	6.5	9	3	5	△												
M11 × 1.25	P2	SPQ011N	2.5P	82	26	-	42	8.5	6.5	9	3	5	△													
M11 × 1	P2	SPQ011M	2.5P	82	26	-	42	8.5	6.5	9	3	5	△													
M11 × 0.75	P2	SPQ011J	2.5P	82	14	-	42	8.5	6.5	9	3	6	△													
M12 × 1.75	P2	SPQ012P	2.5P	82	26	-	42	8.5	6.5	9	3	5	◎													

※External center is removed

SP-5

Think threads with
YAMAWA

◎=Standard ○=Semi standard △=Made to order
For improvement, spec may change without advance notice.

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

SP Spiral Fluted Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M12 × 1.75	P3	SPR012P	2.5P	82	26	-	42	8.5	6.5	9	3	5	○
	P4	SPS012P											○
M12 × 1.5	P2	SPQ0120	2.5P	82	26	-	42	8.5	6.5	9	3	5	◎
	P3	SPR0120											△
M12 × 1.25	P4	SPS0120	2.5P	82	26	-	42	8.5	6.5	9	3	5	△
	P2	SPQ012N											◎
M12 × 1	P3	SPR012N	2.5P	82	26	-	42	8.5	6.5	9	3	5	○
	P4	SPS012N											△
M12 × 0.75	P2	SPQ012M	2.5P	82	26	-	42	8.5	6.5	9	3	5	○
	P3	SPR012M											△
M12 × 0.5	P4	SPS012M	2.5P	82	14	-	42	8.5	6.5	9	3	6	△
	P2	SPQ012J											△
M13 × 1	P2	SPQ012G	2.5P	82	12	-	42	8.5	6.5	9	3	6	△
M13 × 1	P2	SPQ013M	2.5P	88	26	-	45	10.5	8	11	3	5	△
	P2	SPQ014Q											◎
M14 × 2	P3	SPR014Q	2.5P	88	26	-	45	10.5	8	11	3	5	△
	P4	SPS014Q											△
M14 × 1.5	P2	SPQ0140	2.5P	88	26	-	45	10.5	8	11	3	5	◎
	P3	SPR0140											△
M14 × 1.25	P4	SPS0140	2.5P	88	26	-	45	10.5	8	11	3	5	○
	P2	SPQ014N											○
M14 × 1	P2	SPQ014M	2.5P	88	26	-	45	10.5	8	11	3	5	○
M15 × 2	P2	SPQ015Q	2.5P	95	26	-	48	12.5	10	13	3	5	△
M15 × 1.5	P2	SPQ0150	2.5P	95	26	-	48	12.5	10	13	3	5	△
M15 × 1	P2	SPQ015M	2.5P	95	26	-	48	12.5	10	13	3	5	△
	P2	SPQ016Q											◎
M16 × 2	P3	SPR016Q	2.5P	95	26	-	48	12.5	10	13	3	5	○
	P4	SPS016Q											△
M16 × 1.5	P5	SPT016Q	2.5P	95	26	-	48	12.5	10	13	3	5	△
	P2	SPQ0160											◎
M16 × 1	P3	SPR0160	2.5P	95	26	-	48	12.5	10	13	3	5	△
	P4	SPS0160											○
M16 × 1	P2	SPQ016M	2.5P	95	26	-	48	12.5	10	13	3	5	○
M17 × 1.5	P2	SPQ0170	2.5P	100	33	-	51	14	11	14	4	5	△
M17 × 1	P2	SPQ017M	2.5P	100	18	-	51	14	11	14	4	6	△
M18 × 2.5	P3	SPR018R	2.5P	100	33	-	51	14	11	14	4	5	◎
	P4	SPS018R											△
M18 × 2	P3	SPR018Q	2.5P	100	33	-	51	14	11	14	4	5	△
M18 × 1.5	P2	SPQ0180	2.5P	100	33	-	51	14	11	14	4	5	◎
	P3	SPR0180											△
M18 × 1.25	P4	SPS0180	2.5P	100	33	-	51	14	11	14	4	5	△
	P2	SPQ018N											△
M18 × 1	P2	SPQ018M	2.5P	100	18	-	51	14	11	14	4	6	○
M19 × 1.5	P3	SPR0190	2.5P	105	33	-	50	15	12	15	4	7	△
M19 × 1	P2	SPQ019M	2.5P	105	18	-	50	15	12	15	4	8	△
M20 × 2.5	P3	SPR020R	2.5P	105	33	-	50	15	12	15	4	7	◎
	P4	SPS020R											○
M20 × 2	P3	SPR020Q	2.5P	105	33	-	50	15	12	15	4	7	○
M20 × 1.5	P3	SPR0200	2.5P	105	33	-	50	15	12	15	4	7	◎
	P4	SPS0200											△

Spiral Fluted Taps
(for blind hole)

Spiral Fluted Taps
(for through hole)

Spiral Fluted Taps
(for through hole)

Spiral Fluted Taps
(for through hole)

Spiral Fluted Taps
(for through hole)

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(for through hole)

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(for through hole)

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(for through hole)

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(for through hole)

Spiral Fluted Taps
(for through hole)

Spiral Fluted Taps
(for through hole)

Spiral Fluted Taps
(for through hole)

Spiral Fluted Tap Series for blind hole

SP Spiral Fluted Taps

	Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
Spiral Fluted Taps (for blind hole)	M20 × 1.5	P5	SPT0200	2.5P	105	33	-	50	15	12	15	4	7	△
	M20 × 1.25	P2	SPQ020N	2.5P	105	18	-	50	15	12	15	4	8	△
	M20 × 1	P2	SPQ020M	2.5P	105	18	-	50	15	12	15	4	8	○
Spiral Fluted Taps (for through hole)	M22 × 2.5	P3	SPR022R	2.5P	115	33	-	55	17	13	16	4	7	◎
		P4	SPS022R											△
Spiral Pointed Taps (for through hole)	M22 × 2	P3	SPR022Q	2.5P	115	33	-	55	17	13	16	4	7	△
		P3	SPR022Q											○
	M22 × 1.5	P4	SPS022Q	2.5P	115	33	-	55	17	13	16	4	7	△
Hand Taps		P5	SPT022Q											△
	M22 × 1	P2	SPQ022M	2.5P	115	19	-	55	17	13	16	4	8	○
	M23 × 1.5	P3	SPR023Q	2.5P	120	39	-	55	19	15	18	4	7	△
Cemented Carbide Taps	M24 × 3	P3	SPR024S	2.5P	120	39	-	55	19	15	18	4	7	◎
		P4	SPS024S											△
	M24 × 2	P3	SPR024Q	2.5P	120	39	-	55	19	15	18	4	7	○
Roll Taps		P3	SPR024Q											○
	M24 × 1.5	P4	SPS024Q	2.5P	120	39	-	55	19	15	18	4	7	△
		P3	SPR024Q											○
Special Thread Taps Simple Inspection Tools	M24 × 1	P2	SPQ024M	2.5P	120	19	-	55	19	15	18	4	8	○
	M25 × 2	P3	SPR025Q	2.5P	125	39	-	58	19	15	18	4	7	△
	M25 × 1.5	P3	SPR025Q	2.5P	125	39	-	58	19	15	18	4	7	○
Pipe Taps	M25 × 1	P2	SPQ025M	2.5P	125	20	-	58	19	15	18	4	8	△
	M26 × 3	P3	SPR026S	2.5P	130	39	-	60	20	15	18	4	7	△
	M26 × 2	P3	SPR026Q	2.5P	130	39	-	60	20	15	18	4	7	△
Thread Mills	M26 × 1.5	P3	SPR026Q	2.5P	130	39	-	60	20	15	18	4	7	○
	M26 × 1	P2	SPQ026M	2.5P	130	20	-	60	20	15	18	4	8	△
	M27 × 3	P3	SPR027S	2.5P	130	39	-	60	20	15	18	4	7	○
Dies	M27 × 2	P3	SPR027Q	2.5P	130	39	-	60	20	15	18	4	7	○
	M27 × 1.5	P3	SPR027Q	2.5P	130	39	-	60	20	15	18	4	7	○
	M27 × 1	P2	SPQ027M	2.5P	130	20	-	60	20	15	18	4	8	△
Center Drills	M28 × 2	P3	SPR028Q	2.5P	135	46	-	62	23	17	20	4	7	○
	M28 × 1.5	P3	SPR028Q	2.5P	135	46	-	62	23	17	20	4	7	○
	M28 × 1	P2	SPQ028M	2.5P	135	20	-	62	23	17	20	4	8	△
Centering Tools	M30 × 3.5	P4	SPS030T	2.5P	135	46	-	62	23	17	20	4	7	◎
	M30 × 3	P3	SPR030S	2.5P	135	46	-	62	23	17	20	4	7	○
	M30 × 2	P3	SPR030Q	2.5P	135	46	-	62	23	17	20	4	7	○
	M30 × 1.5	P3	SPR030Q	2.5P	135	46	-	62	23	17	20	4	7	○
	M30 × 1	P2	SPQ030M	2.5P	135	21	-	62	23	17	20	4	8	△
	M32 × 3	P3	SPMR032S	2.5P	145	46	-	67	24	19	22	4	7	△
	M32 × 2	P3	SPMR032Q	2.5P	145	46	-	67	24	19	22	4	7	△
	M32 × 1.5	P3	SPMR032Q	2.5P	145	46	-	67	24	19	22	4	7	△
	M32 × 1	P2	SPMQ032M	2.5P	145	21	-	67	24	19	22	4	8	△
	M33 × 3.5	P4	SPMS033T	2.5P	145	46	-	67	25	19	22	4	7	○
	M33 × 3	P3	SPMR033S	2.5P	145	46	-	67	25	19	22	4	7	△
	M33 × 2	P3	SPMR033Q	2.5P	145	46	-	67	25	19	22	4	7	△
	M33 × 1.5	P3	SPMR033Q	2.5P	145	46	-	67	25	19	22	4	7	△
	M33 × 1	P2	SPMQ033M	2.5P	145	21	-	67	25	19	22	4	8	△
	M34 × 3	P3	SPMR034S	2.5P	155	52	-	71	28	21	24	4	7	△
	M34 × 2	P3	SPMR034Q	2.5P	155	52	-	71	28	21	24	4	7	△
	M34 × 1.5	P3	SPMR034Q	2.5P	155	26	-	71	28	21	24	4	8	△
	M34 × 1	P2	SPMQ034M	2.5P	155	26	-	71	28	21	24	4	8	△
	M35 × 3	P3	SPMR035S	2.5P	155	52	-	71	28	21	24	4	7	△

SP-7



○=Standard ○=Semi standard △=Made to order
For improvement, spec may change without advance notice.

SP Spiral Fluted Taps

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

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M35 × 2	P3	SPMR035Q	2.5P	155	52	-	71	28	21	24	4	7	△
M35 × 1.5	P3	SPMR035O	2.5P	155	26	-	71	28	21	24	4	8	△
M35 × 1	P2	SPMQ035M	2.5P	155	26	-	71	28	21	24	4	8	△
M36 × 4	P4	SPMS036U	2.5P	155	52	-	71	28	21	24	4	7	◎
M36 × 3	P3	SPMR036S	2.5P	155	52	-	71	28	21	24	4	7	△
M36 × 2	P3	SPMR036Q	2.5P	155	52	-	71	28	21	24	4	7	△
M36 × 1.5	P3	SPMR036O	2.5P	155	26	-	71	28	21	24	4	8	△
M36 × 1	P2	SPMQ036M	2.5P	155	26	-	71	28	21	24	4	8	△
M38 × 3	P3	SPMR038S	2.5P	165	52	-	76	30	23	26	4	7	△
M38 × 2	P3	SPMR038Q	2.5P	165	52	-	76	30	23	26	4	7	△
M38 × 1.5	P3	SPMR038O	2.5P	165	26	-	76	30	23	26	4	8	△
M39 × 4	P4	SPMS039U	2.5P	165	52	-	76	30	23	26	4	7	△
M39 × 3	P3	SPMR039S	2.5P	165	52	-	76	30	23	26	4	7	△
M39 × 2	P3	SPMR039Q	2.5P	165	52	-	76	30	23	26	4	7	△
M39 × 1.5	P3	SPMR039O	2.5P	165	26	-	76	30	23	26	4	8	△
M40 × 3	P3	SPMR040S	2.5P	175	59	-	81	32	26	30	4	7	△
M40 × 2	P3	SPMR040Q	2.5P	175	59	-	81	32	26	30	4	7	△
M40 × 1.5	P3	SPMR040O	2.5P	175	27	-	81	32	26	30	4	8	△
M42 × 4.5	P4	SPMS042V	2.5P	175	59	-	81	32	26	30	4	7	△
M42 × 3	P3	SPMR042S	2.5P	175	59	-	81	32	26	30	4	7	△
M42 × 2	P3	SPMR042Q	2.5P	175	59	-	81	32	26	30	4	7	△
M42 × 1.5	P3	SPMR042O	2.5P	175	27	-	81	32	26	30	4	8	△
M45 × 4.5	P4	SPMS045V	2.5P	180	59	-	83	35	26	30	4	7	△
M45 × 3	P3	SPMR045S	2.5P	180	59	-	83	35	26	30	4	7	△
M45 × 2	P3	SPMR045Q	2.5P	180	59	-	83	35	26	30	4	7	△
M45 × 1.5	P3	SPMR045O	2.5P	180	27	-	83	35	26	30	4	8	△
M48 × 5	P4	SPMS048W	2.5P	185	65	-	85	38	29	32	4	7	△
M48 × 4	P4	SPMS048U	2.5P	185	65	-	85	38	29	32	4	7	△
M48 × 3	P3	SPMR048S	2.5P	185	65	-	85	38	29	32	4	7	△
M48 × 2	P3	SPMR048Q	2.5P	185	65	-	85	38	29	32	4	7	△
M48 × 1.5	P3	SPMR048O	2.5P	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.1-64UNC	P1	SPPUN1D	2.5P	42	7.2	-	27	3	2.5	5	2	2	△
No.2-56UNC	P1	SPPUN2E	2.5P	42	8.1	12	27	3	2.5	5	2	3	△
No.2-64UNF	P1	SPPUN2D	2.5P	42	8.1	12	27	3	2.5	5	2	3	△
No.3-48UNC	P1	SPPUN3F	2.5P	46	8.1	14	29	3	2.5	5	2	3	△
No.3-56UNF	P1	SPPUN3E	2.5P	46	8.1	14	29	3	2.5	5	2	3	△
No.4-40UNC	P1	SPPUN4H	2.5P	46	9	14	26	4	3.2	6	2	3	○
No.4-48UNF	P1	SPPUN4F	2.5P	46	9	14	26	4	3.2	6	2	3	△
No.5-40UNC	P1	SPPUN5H	2.5P	52	11	16	29	5	4	7	3	3	○
No.5-44UNF	P1	SPPUN5G	2.5P	52	11	16	29	5	4	7	3	3	△
No.6-32UNC	P2	SPQUN6J	2.5P	52	11	16	29	5	4	7	3	3	○
No.6-40UNF	P1	SPPUN6H	2.5P	52	11	16	29	5	4	7	3	3	△
No.8-32UNC	P2	SPQUN8J	2.5P	60	13	21	33	5.5	4.5	7	3	3	○
No.8-36UNF	P2	SPQUN8I	2.5P	60	13	21	33	5.5	4.5	7	3	3	△
No.10-24UNC	P2	SPQUNAM	2.5P	60	13	22	33	5.5	4.5	7	3	3	○
No.10-32UNF	P2	SPQUNAJ	2.5P	60	13	22	33	5.5	4.5	7	3	3	○
No.12-24UNC	P2	SPQUNCM	2.5P	62	15	26	33	6	4.5	7	3	3	△
No.12-28UNF	P2	SPQUNCK	2.5P	62	15	26	33	6	4.5	7	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

Spiral Fluted Tap Series for blind hole

SP Spiral Fluted Taps

	Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
Spiral Fluted Taps (for blind hole)	1/4-20UNC	P2	SPQU04N	2.5P	62	15	26	33	6	4.5	7	3	3	◎
	1/4-28UNF	P2	SPQU04K	2.5P	62	15	26	33	6	4.5	7	3	3	○
	1/4-32UNEF	P2	SPQU04J	2.5P	62	15	26	33	6	4.5	7	3	3	△
Spiral Fluted Taps (for through hole)	5/16-18UNC	P2	SPQU05O	2.5P	70	19	-	36	6.2	5	8	3	5	◎
	5/16-24UNF	P2	SPQU05M	2.5P	70	19	-	36	6.2	5	8	3	5	○
	5/16-32UNEF	P2	SPQU05J	2.5P	70	19	-	36	6.2	5	8	3	5	△
Spiral Pointed Taps (for through hole)	3/8-16UNC	P2	SPQU06P	2.5P	75	23	-	38	7	5.5	8	3	5	◎
	3/8-24UNF	P2	SPQU06M	2.5P	75	23	-	38	7	5.5	8	3	5	○
	7/16-14UNC	P3	SPRU07Q	2.5P	82	26	-	42	8.5	6.5	9	3	5	○
Hand Taps	7/16-20UNF	P2	SPQU07N	2.5P	82	26	-	42	8.5	6.5	9	3	5	○
	1/2-13UNC	P3	SPRU08R	2.5P	88	26	-	45	10.5	8	11	3	5	○
	1/2-20UNF	P2	SPQU08N	2.5P	88	26	-	45	10.5	8	11	3	5	○
Cemented Carbide Taps	9/16-12UNC	P3	SPRU09S	2.5P	95	26	-	48	12.5	10	13	3	5	△
	9/16-18UNF	P2	SPQU09O	2.5P	95	26	-	48	12.5	10	13	3	5	○
	9/16-24UNEF	P2	SPQU09M	2.5P	95	26	-	48	12.5	10	13	3	5	△
Roll Taps	5/8-11UNC	P3	SPRU10U	2.5P	95	26	-	48	12.5	10	13	3	5	○
	5/8-18UNF	P2	SPQU10O	2.5P	95	26	-	48	12.5	10	13	3	5	○
	5/8-24UNEF	P2	SPQU10M	2.5P	95	26	-	48	12.5	10	13	3	5	△
Special Thread Taps Simple Inspection Tools	3/4-10UNC	P3	SPRU12V	2.5P	105	33	-	50	15	12	15	4	7	○
	3/4-16UNF	P3	SPRU12P	2.5P	105	33	-	50	15	12	15	4	7	○
	3/4-20UNEF	P2	SPQU12N	2.5P	105	33	-	50	15	12	15	4	7	△
Pipe Taps	7/8-9UNC	P3	SPRU14W	2.5P	115	33	-	55	17	13	16	4	7	○
	7/8-14UNF	P3	SPRU14Q	2.5P	115	33	-	55	17	13	16	4	7	○
	7/8-20UNEF	P2	SPQU14N	2.5P	115	33	-	55	17	13	16	4	7	△
Thread Mills	1 -8UNC	P3	SPRU16X	2.5P	125	39	-	58	19	15	18	4	7	○
	1 -12UNF	P3	SPRU16S	2.5P	125	39	-	58	19	15	18	4	7	△
	1 -14UNS	P3	SPRU16Q	2.5P	125	39	-	58	19	15	18	4	7	△
Dies	1 -20UNEF	P2	SPQU16N	2.5P	125	39	-	58	19	15	18	4	7	△
	1 1/8-7UNC	P4	SPSU18Y	2.5P	135	46	-	62	23	17	20	4	7	△
	1 1/8-12UNF	P3	SPRU18S	2.5P	135	46	-	62	23	17	20	4	7	△
Center Drills	1 1/4-7UNC	P4	SPMSU20Y	2.5P	145	46	-	67	24	19	22	4	7	△
	1 1/4-8UN	P3	SPMRU20X	2.5P	145	46	-	67	24	19	22	4	7	△
	1 1/4-12UNF	P3	SPMRU20S	2.5P	145	46	-	67	24	19	22	4	7	△
Centering Tools	1 3/8-6UNC	P4	SPMSU22Z	2.5P	155	52	-	71	28	21	24	4	7	△
	1 3/8-8UN	P3	SPMRU22X	2.5P	155	52	-	71	28	21	24	4	7	△
	1 3/8-12UNF	P3	SPMRU22S	2.5P	155	52	-	71	28	21	24	4	7	△
	1 1/2-6UNC	P4	SPMSU24Z	2.5P	165	52	-	76	30	23	26	4	7	△
	1 1/2-12UNF	P3	SPMRU24S	2.5P	165	52	-	76	30	23	26	4	7	△
	1 3/4-5UNC	P4	SPMSU28O	2.5P	180	59	-	83	35	26	30	4	7	△
	1 3/4-12UN	P3	SPMRU28S	2.5P	180	59	-	83	35	26	30	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	P1	SPPW02H	2.5P	52	11	17	29	5	4	7	3	3	○
	5/32W32	P2	SPQW2HJ	2.5P	52	11	17	29	5	4	7	3	3	△
	3/16W24	P2	SPQW03M	2.5P	60	13	21	33	5.5	4.5	7	3	3	○
	7/32W24	P2	SPQW3HM	2.5P	62	15	26	33	6	4.5	7	3	3	△
	1/4W20	P2	SPQW04N	2.5P	62	15	26	33	6	4.5	7	3	3	○
	5/16W18	P2	SPQW05O	2.5P	70	19	-	36	6.2	5	8	3	5	○
	3/8W16	P2	SPQW06P	2.5P	75	23	-	38	7	5.5	8	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

SP Spiral Fluted Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
7/16W14	P3	SPRW07Q	2.5P	82	26	-	42	8.5	6.5	9	3	5	△
1/2W12	P3	SPRW08S	2.5P	88	26	-	45	10.5	8	11	3	5	○
9/16W12	P3	SPRW09S	2.5P	95	26	-	48	12.5	10	13	3	5	△
5/8W11	P3	SPRW10U	2.5P	95	26	-	48	12.5	10	13	3	5	○
3/4W10	P3	SPRW12V	2.5P	105	33	-	50	15	12	15	4	7	○
7/8W9	P3	SPRW14W	2.5P	115	33	-	55	17	13	16	4	7	○
1 W8	P3	SPRW16X	2.5P	125	39	-	58	19	15	18	4	7	○
1 1/8W7	P4	SPSW18Y	2.5P	135	46	-	62	23	17	20	4	7	△
1 1/4W7	P4	SPMSW20Y	2.5P	145	46	-	67	24	19	22	4	7	△
1 3/8W6	P4	SPMSW22Z	2.5P	155	52	-	71	28	21	24	4	7	△
1 1/2W6	P4	SPMSW24Z	2.5P	165	52	-	76	30	23	26	4	7	△
1 5/8W5	P4	SPMSW260	2.5P	175	59	-	81	32	26	30	4	7	△
1 3/4W5	P4	SPMSW280	2.5P	180	59	-	83	35	26	30	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	SPPS06E	2.5P	46	8.1	14	29	3	2.5	5	2	3	△
1/8SM40	P1	SPPS08H	2.5P	52	11	16	29	5	4	7	3	3	△
1/8SM44	P1	SPPS08G	2.5P	52	11	16	29	5	4	7	3	3	○
9/64SM40	P1	SPPS09H	2.5P	52	11	17	29	5	4	7	3	3	○
11/64SM40	P1	SPPS11H	2.5P	60	13	21	33	5.5	4.5	7	3	3	○
3/16SM28	P2	SPQS12K	2.5P	60	13	21	33	5.5	4.5	7	3	3	△
3/16SM32	P2	SPQS12J	2.5P	60	13	21	33	5.5	4.5	7	3	3	△
7/32SM32	P2	SPQS14J	2.5P	62	15	26	33	6	4.5	7	3	3	△
15/64SM28	P2	SPQS15K	2.5P	62	15	26	33	6	4.5	7	3	3	△
1/4SM24	P2	SPQS16M	2.5P	62	15	26	33	6	4.5	7	3	3	△
1/4SM40	P1	SPPS16H	2.5P	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

SP 1.5P

Spiral Fluted Taps 1.5P

Specification

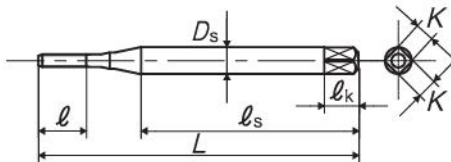


Recommended Tapping Speeds depending on Materials

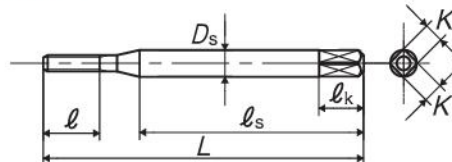
Medium carbon steels
中炭鋼
5~10
(m/min)

For icon explanation, refer to P.24

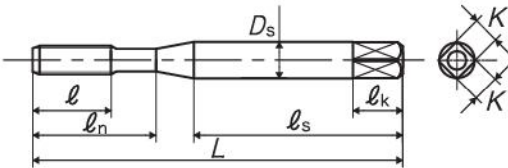
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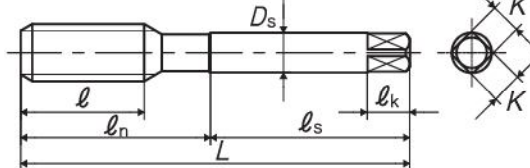
TYPE:2



TYPE:3



TYPE:4



Segment : 1C

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	SY1.2BPNEBA	1.5P	36	4.5	-	24	3	2.5	5	2	1	△
M1.4 × 0.3	P1	SY1.4CPNEBA	1.5P	36	5.4	-	24	3	2.5	5	2	1	△
M1.6 × 0.35	P1	SY1.6DPNEBA	1.5P	36	6.3	-	24	3	2.5	5	2	2	○
M1.7 × 0.35	P1	SY1.7DPNEBA	1.5P	36	6.3	-	24	3	2.5	5	2	2	△
M1.8 × 0.35	P1	SY1.8DPNEBA	1.5P	42	6.3	-	27	3	2.5	5	2	2	△
M2 × 0.4	P1	SY2.0EPNEBA	1.5P	42	7.2	12	27	3	2.5	5	2	3	○
M2.3 × 0.4	P1	SY2.3EPNEBA	1.5P	42	7.2	12	27	3	2.5	5	2	3	△
M2.5 × 0.45	P1	SY2.5FPNEBA	1.5P	46	8.1	14	29	3	2.5	5	2	3	△
M2.6 × 0.45	P1	SY2.6FPNEBA	1.5P	46	8.1	14	29	3	2.5	5	2	3	△
M3 × 0.5	P1	SY3.0GPNEBA	1.5P	46	9	14	26	4	3.2	6	3	3	○
M3.5 × 0.6	P1	SY3.5HPNEBA	1.5P	52	11	16	29	5	4	7	3	3	△
M4 × 0.7	P2	SY4.0IQNEBA	1.5P	52	11	17	29	5	4	7	3	3	○
M5 × 0.8	P2	SY5.0KQNEBA	1.5P	60	13	22	33	5.5	4.5	7	3	3	○
M6 × 1	P2	SY6.0MQNEBA	1.5P	62	15	26	33	6	4.5	7	3	3	○
M8 × 1.25	P2	SY8.0NQNEBA	1.5P	70	19	-	36	6.2	5	8	3	4	○
M8 × 1	P2	SY8.0MQNEBA	1.5P	70	19	-	36	6.2	5	8	3	4	△
M10 × 1.5	P2	SY0100QNEBA	1.5P	75	23	-	38	7	5.5	8	3	4	○
M10 × 1.25	P2	SY010NQNEBA	1.5P	75	23	-	38	7	5.5	8	3	4	△
M10 × 1	P2	SY010MQNEBA	1.5P	75	23	-	38	7	5.5	8	3	4	△

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

SP 1.5P Spiral Fluted Taps 1.5P

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M12 × 1.75	P2	SY012PQNEBA	1.5P	82	26	-	42	8.5	6.5	9	3	4	○
M12 × 1.5	P2	SY0120QNEBA	1.5P	82	26	-	42	8.5	6.5	9	3	4	△
M12 × 1.25	P2	SY012NQNEBA	1.5P	82	26	-	42	8.5	6.5	9	3	4	△
M14 × 2	P2	SY014QQNEBA	1.5P	88	26	-	45	10.5	8	11	3	4	△
M14 × 1.5	P2	SY0140QNEBA	1.5P	88	26	-	45	10.5	8	11	3	4	△
M16 × 2	P2	SY016QQNEBA	1.5P	95	26	-	48	12.5	10	13	3	4	△
M16 × 1.5	P2	SY0160QNEBA	1.5P	95	26	-	48	12.5	10	13	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

+SP

Plus Series Spiral Fluted Taps

Specification

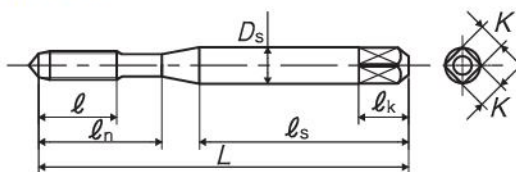


Recommended Tapping Speeds depending on Materials

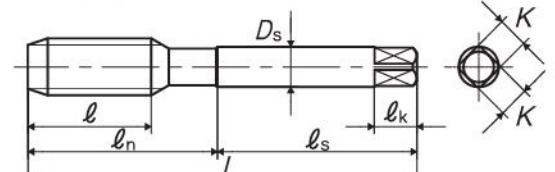
Medium carbon steels
中炭鋼類
10~15
(m/min)

For icon explanation, refer to P.24

TYPE:1



TYPE:2



Segment : 1C

○ Oversize

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	P1	SNPP2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	1	⊙
	P2	SNPQ2.0E											○
	P3	SNPR2.0E											⊙
	P4	SNPS2.0E											△
M2.2 × 0.45	P1	SNPP2.2F	2.5P	42	8.1	12	27	3	2.5	5	2	1	○
	P3	SNPR2.2F											△
	P1	SNPP2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	1	○
	P2	SNPQ2.3E											△
M2.3 × 0.4	P3	SNPR2.3E											△
	P4	SNPS2.3E											△
M2.5 × 0.45	P1	SNPP2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	1	⊙
	P2	SNPQ2.5F											○
	P3	SNPR2.5F											○
	P4	SNPS2.5F											○
M2.6 × 0.45	P1	SNPP2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	1	⊙
	P2	SNPQ2.6F											○
	P3	SNPR2.6F											○
	P4	SNPS2.6F											△
M3 × 0.5	P1	SNPP3.0G	2.5P	46	9	14	26	4	3.2	6	3	1	⊙
	P2	SNPQ3.0G											○
	P3	SNPR3.0G											○
	P4	SNPS3.0G											○
M3.5 × 0.6	P1	SNPP3.5H	2.5P	52	11	16	29	5	4	7	3	1	○
	P2	SNPQ3.5H											○
	P3	SNPR3.5H											△
	P4	SNPS3.5H											△
M4 × 0.7	P2	SNPQ4.0I	2.5P	52	11	17	29	5	4	7	3	1	⊙

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

+SP Plus Series Spiral Fluted Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M4 × 0.7	P3	SNPR4.0I	2.5P	52	11	17	29	5	4	7	3	1	○
	P4	SNPS4.0I											○
M5 × 0.8	P2	SNPQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	1	◎
	P3	SNPR5.0K											○
	P4	SNPS5.0K											○
M6 × 1	P2	SNPQ6.0M	2.5P	62	15	26	33	6	4.5	7	3	1	◎
	P3	SNPR6.0M											○
	P4	SNPS6.0M											○
M8 × 1.25	P2	SNPQ8.0N	2.5P	70	19	-	36	6.2	5	8	3	2	◎
	P3	SNPR8.0N											○
	P4	SNPS8.0N											○
M10 × 1.5	P2	SNPQ0100	2.5P	75	23	-	38	7	5.5	8	3	2	◎
	P3	SNPR0100											○
	P4	SNPS0100											○
M10 × 1.25	P2	SNPQ010N	2.5P	75	23	-	38	7	5.5	8	3	2	◎
	P3	SNPR010N											○
	P4	SNPS010N											○
M12 × 1.75	P2	SNPQ012P	2.5P	82	26	-	42	8.5	6.5	9	3	2	◎
	P3	SNPR012P											○
	P4	SNPS012P											○
M12 × 1.25	P2	SNPQ012N	2.5P	82	26	-	42	8.5	6.5	9	3	2	◎
	P3	SNPR012N											○
	P4	SNPS012N											○

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

XSP

X Series Spiral Fluted Taps

Specification



Recommended Tapping Speeds depending on Materials

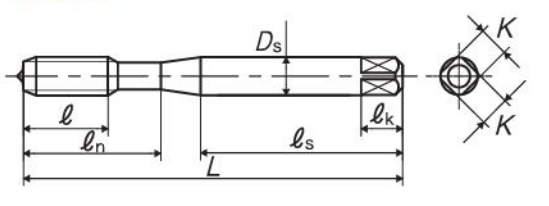
Medium carbon steels
中炭鋼
10~15
(m/min)

For icon explanation, refer to P.24

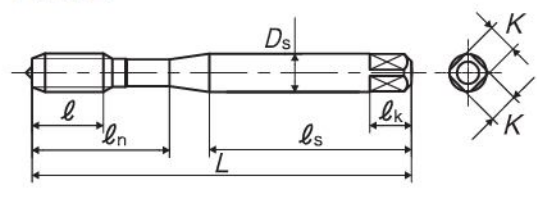
■Applying the blanks of high toughness and high accuracy, XSP derives the maximum performance from high facility machining centers and high precision toolings. Spiral fluted tap.



TYPE:1



TYPE:2



Segment : 1C

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	SNXQ6.0M	2.5P	80	15	30	45	6	4.9	8	3	1	○
M8 × 1.25	P3	SNXR8.0N	2.5P	90	19	35	48	8	6.2	9	3	1	○
M8 × 1	P3	SNXR8.0M	2.5P	90	15	35	48	8	6.2	9	3	2	○
M10 × 1.5	P3	SNXR0100	2.5P	100	23	39	53	10	8	11	3	1	○
M10 × 1.25	P3	SNXR010N	2.5P	100	19	39	53	10	8	11	3	2	○
M10 × 1	P3	SNXR010M	2.5P	100	15	39	53	10	8	11	3	2	○
M12 × 1.75	P3	SNXR012P	2.5P	110	26	45	56	12	9	12	3	1	○
M12 × 1.5	P3	SNXR0120	2.5P	110	23	45	56	12	9	12	3	2	○
M12 × 1.25	P3	SNXR012N	2.5P	110	19	45	56	12	9	12	3	2	○

Note:

- Please use tapping holders suitable for the shank diameter and square of DIN371 for M6~M10 and those of M16 (DIN376) for M12.
- Overall length, shank diameter and square of metric coarse series are adopted for those of metric fine series.

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

SP OX

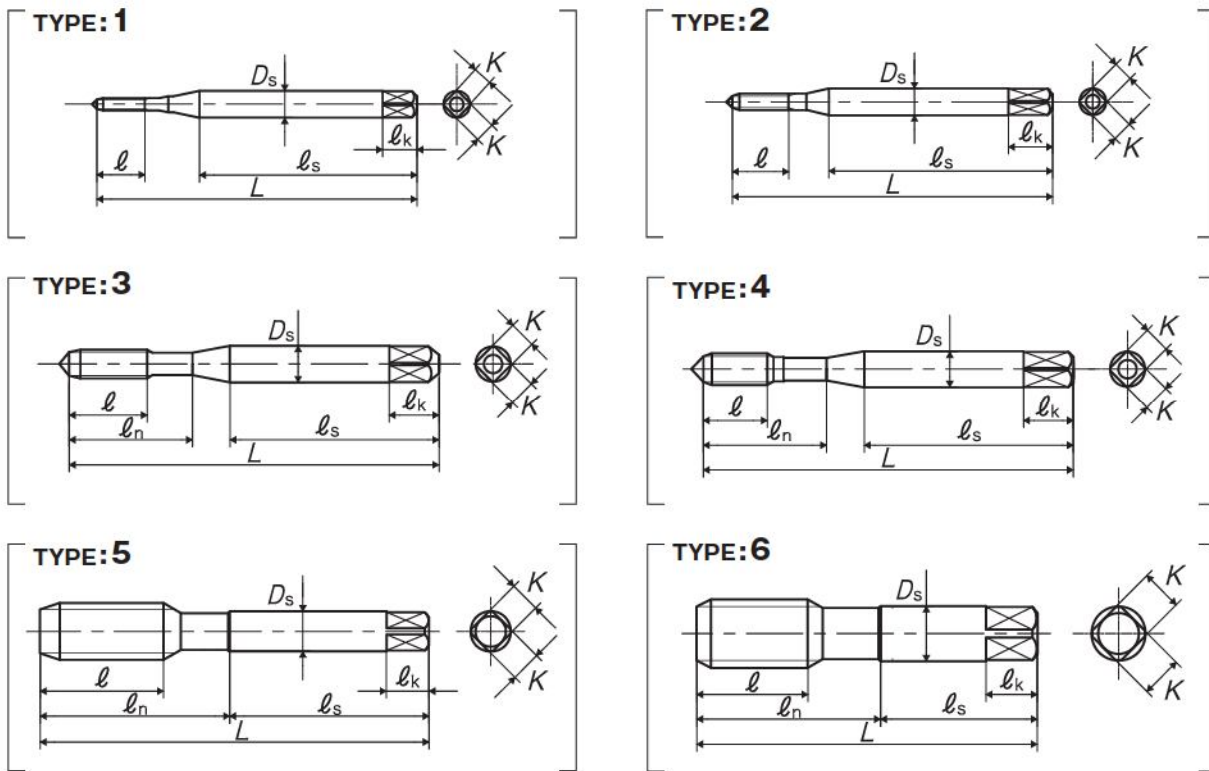
Spiral Fluted Taps, Oxided
Specification



Recommended Tapping Speeds depending on Materials

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

For icon explanation, refer to P.24



○ Oversize

Segment : 1C

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	SPP1.4CX	2.5P	36	5.4	-	24	3	2.5	5	2	1	△
M1.6 × 0.35	P1	SPP1.6DX	2.5P	36	6.3	-	24	3	2.5	5	2	2	△
M1.7 × 0.35	P1	SPP1.7DX	2.5P	36	6.3	-	24	3	2.5	5	2	2	△
M2 × 0.4	P1	SPP2.0EX	2.5P	42	7.2	12	27	3	2.5	5	2	3	△
M2.5 × 0.45	P1	SPP2.5FX	2.5P	46	8.1	14	29	3	2.5	5	2	3	△
M2.6 × 0.45	P1	SPP2.6FX	2.5P	46	8.1	14	29	3	2.5	5	2	3	△
M3 × 0.5	P1	SPP3.0GX	2.5P	46	9	14	26	4	3.2	6	3	3	○
	P2	SPQ3.0GX											△
	P3	SPR3.0GX											△
3M0.6	P1	SPP3.0HX	2.5P	46	9	14	26	4	3.2	6	3	3	△
M3.5 × 0.6	P1	SPP3.5HX	2.5P	52	11	16	29	5	4	7	3	3	△

○=Standard ○=Semi standard △=Made to order
For improvement, spec may change without advance notice.

Think threads with
YAMAWA

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

Center Drills

Centering Tools

Centering Tools

SP-16

41

Spiral Fluted Tap Series for blind hole

SP OX Spiral Fluted Taps, Oxidized

Spiral Fluted Taps (for blind hole)	Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
	M4 × 0.7	P2	SPQ4.0IX	2.5P	52	11	17	29	5	4	7	3	3	⊙
		P3	SPR4.0IX											△
		P4	SPS4.0IX											△
M4 × 0.5	P1	SPP4.0GX	2.5P	52	9	17	29	5	4	7	3	4	△	
M4.5 × 0.5	P1	SPP4.5GX	2.5P	60	9	21	33	5.5	4.5	7	3	4	△	
Spiral Fluted Taps (for through hole)	M5 × 0.8	P2	SPQ5.0KX	2.5P	60	13	22	33	5.5	4.5	7	3	3	⊙
		P3	SPR5.0KX											△
		P4	SPS5.0KX											△
Spiral Pointed Taps (for through hole)	M6 × 1	P2	SPQ6.0MX	2.5P	62	15	26	33	6	4.5	7	3	3	⊙
		P3	SPR6.0MX											△
		P4	SPS6.0MX											△
Hand Taps	M6 × 0.75	P2	SPQ6.0JX	2.5P	62	15	26	33	6	4.5	7	3	3	△
	M7 × 1	P2	SPQ7.0MX	2.5P	70	19	-	36	6.2	5	8	3	5	△
	Cemented Carbide Taps	M8 × 1.25	P2	SPQ8.0NX	2.5P	70	19	-	36	6.2	5	8	3	5
P3			SPR8.0NX	△										
P4			SPS8.0NX	△										
Roll Taps	M8 × 1	P2	SPQ8.0MX	2.5P	70	19	-	36	6.2	5	8	3	5	△
	M10 × 1.5	P2	SPQ0100X	2.5P	75	23	-	38	7	5.5	8	3	5	⊙
	Special Thread Taps Simple Inspection Tools	M10 × 1.25	P2	SPQ010NX	2.5P	75	23	-	38	7	5.5	8	3	5
P3			SPR010NX	△										
M10 × 1		P2	SPQ010MX	2.5P	75	23	-	38	7	5.5	8	3	5	△
Pipe Taps	M12 × 1.75	P2	SPQ012PX	2.5P	82	26	-	42	8.5	6.5	9	3	5	⊙
	M12 × 1.5	P2	SPQ0120X	2.5P	82	26	-	42	8.5	6.5	9	3	5	△
	M12 × 1.25	P2	SPQ012NX	2.5P	82	26	-	42	8.5	6.5	9	3	5	△
Thread Mills	M12 × 1	P2	SPQ012MX	2.5P	82	26	-	42	8.5	6.5	9	3	5	△
	M14 × 2	P2	SPQ014QX	2.5P	88	26	-	45	10.5	8	11	3	5	△
	M14 × 1.5	P2	SPQ0140X	2.5P	88	26	-	45	10.5	8	11	3	5	△
Dies	M14 × 1	P2	SPQ014MX	2.5P	88	26	-	45	10.5	8	11	3	5	△
	M16 × 2	P2	SPQ016QX	2.5P	95	26	-	48	12.5	10	13	3	5	⊙
	M16 × 1.5	P2	SPQ0160X	2.5P	95	26	-	48	12.5	10	13	4	5	△
Center Drills	M18 × 2.5	P3	SPR018RX	2.5P	100	33	-	51	14	11	14	4	5	△
	M18 × 1.5	P2	SPQ0180X	2.5P	100	33	-	51	14	11	14	4	5	△
	M20 × 2.5	P3	SPR020RX	2.5P	105	33	-	50	15	12	15	4	6	⊙
Centering Tools	M20 × 1.5	P3	SPR0200X	2.5P	105	33	-	50	15	12	15	4	6	△
	M22 × 2.5	P3	SPR022RX	2.5P	115	33	-	55	17	13	16	4	6	△
	M22 × 1.5	P3	SPR0220X	2.5P	115	33	-	55	17	13	16	4	6	△
For Unified Threads	M24 × 3	P3	SPR024SX	2.5P	120	39	-	55	19	15	18	4	6	△
	M24 × 1.5	P3	SPR0240X	2.5P	120	39	-	55	19	15	18	4	6	△
	M27 × 3	P3	SPR027SX	2.5P	130	39	-	60	20	15	18	4	6	△
Centering Tools	M30 × 3.5	P4	SPS030TX	2.5P	135	46	-	62	23	17	20	4	6	△
	M30 × 1.5	P3	SPR0300X	2.5P	135	46	-	62	23	17	20	4	6	△
	M33 × 3.5	P4	SPS033TX	2.5P	145	46	-	67	25	19	22	4	6	△
Centering Tools	M36 × 4	P4	SPS036UX	2.5P	155	52	-	71	28	21	24	4	6	△
	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
Centering Tools	No.2-56UNC	P1	SPPUN2EX	2.5P	42	8.1	12	27	3	2.5	5	2	3	△
	No.4-40UNC	P1	SPPUN4HX	2.5P	46	9	14	26	4	3.2	6	2	3	△
	No.5-40UNC	P1	SPPUN5HX	2.5P	52	11	16	29	5	4	7	3	3	△
	No.6-32UNC	P2	SPQUN6JX	2.5P	52	11	16	29	5	4	7	3	3	△
	No.8-32UNC	P2	SPQUN8JX	2.5P	60	13	21	33	5.5	4.5	7	3	3	△

SP-17



Think threads with
 ⊙=Standard ○=Semi standard △=Made to order
 For improvement, spec may change without advance notice.

SP OX Spiral Fluted Taps, Oxidized

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

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
No.10-24UNC	P2	SPQUNAMX	2.5P	60	13	22	33	5.5	4.5	7	3	3	△
No.10-32UNF	P2	SPQUNAJX	2.5P	60	13	22	33	5.5	4.5	7	3	3	△
1/4-20UNC	P2	SPQU04NX	2.5P	62	15	26	33	6	4.5	7	3	3	△
1/4-28UNF	P2	SPQU04KX	2.5P	62	15	26	33	6	4.5	7	3	3	△
5/16-18UNC	P2	SPQU050X	2.5P	70	19	-	36	6.2	5	8	3	5	△
5/16-24UNF	P2	SPQU05MX	2.5P	70	19	-	36	6.2	5	8	3	5	△
3/8-16UNC	P2	SPQU06PX	2.5P	75	23	-	38	7	5.5	8	3	5	△
3/8-24UNF	P2	SPQU06MX	2.5P	75	23	-	38	7	5.5	8	3	5	△
7/16-14UNC	P3	SPRU07QX	2.5P	82	26	-	42	8.5	6.5	9	3	5	△
7/16-20UNF	P2	SPQU07NX	2.5P	82	26	-	42	8.5	6.5	9	3	5	△
1/2-13UNC	P2	SPRU08RX	2.5P	88	26	-	45	10.5	8	11	3	5	△
1/2-20UNF	P2	SPQU08NX	2.5P	88	26	-	45	10.5	8	11	3	5	△
5/8-11UNC	P3	SPRU10UX	2.5P	95	26	-	48	12.5	10	13	3	5	△
5/8-18UNF	P2	SPQU100X	2.5P	95	26	-	48	12.5	10	13	3	5	△
3/4-10UNC	P3	SPRU12VX	2.5P	105	33	-	50	15	12	15	4	6	△
3/4-16UNF	P3	SPRU12PX	2.5P	105	33	-	50	15	12	15	4	6	△
7/8-9UNC	P3	SPRU14WX	2.5P	115	33	-	55	17	13	16	4	6	△
7/8-14UNF	P3	SPRU14QX	2.5P	115	33	-	55	17	13	16	4	6	△
1 -8UNC	P3	SPRU16XX	2.5P	125	39	-	58	19	15	18	4	6	△
1 -12UNF	P3	SPRU16SX	2.5P	125	39	-	58	19	15	18	4	6	△
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
3/16W24	P2	SPQW03MX	2.5P	60	13	21	33	5.5	4.5	7	3	3	△
1/4W20	P2	SPQW04NX	2.5P	62	15	26	33	6	4.5	7	3	3	△
5/16W18	P2	SPQW050X	2.5P	70	19	-	36	6.2	5	8	3	5	△
3/8W16	P2	SPQW06PX	2.5P	75	23	-	38	7	5.5	8	3	5	△
7/16W14	P3	SPRW07QX	2.5P	82	26	-	42	8.5	6.5	9	3	5	△
1/2W12	P3	SPRW08SX	2.5P	88	26	-	45	10.5	8	11	3	5	△
5/8W11	P3	SPRW10UX	2.5P	95	26	-	48	12.5	10	13	3	5	△
3/4W10	P3	SPRW12VX	2.5P	105	33	-	50	15	12	15	4	6	△
7/8W9	P3	SPRW14WX	2.5P	115	33	-	55	17	13	16	4	6	△
1 W8	P3	SPRW16XX	2.5P	125	39	-	58	19	15	18	4	6	△

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

+SP OX

Plus Series Spiral Fluted Taps, Oxidized
Specification

HSS

OX
Oxide

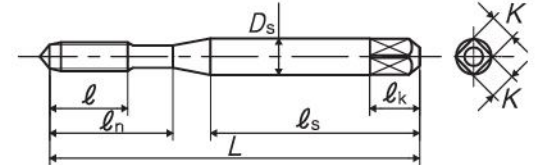


Recommended Tapping Speeds depending on Materials

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

For icon explanation, refer to P.24

TYPE: 1



Oversize Segment : 1C													
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													
M2 × 0.4	P1	SNPP2.0EX	2.5P	42	7.2	12	27	3	2.5	5	2	1	△
	P2	SNPQ2.0EX											
	P3	SNPR2.0EX											
	P4	SNPS2.0EX											
M2.5 × 0.45	P1	SNPP2.5FX	2.5P	46	8.1	14	29	3	2.5	5	2	1	△
	P2	SNPQ2.5FX											
	P3	SNPR2.5FX											
	P4	SNPS2.5FX											
M2.6 × 0.45	P1	SNPP2.6FX	2.5P	46	8.1	14	29	3	2.5	5	2	1	△
	P2	SNPQ2.6FX											
	P3	SNPR2.6FX											
	P4	SNPS2.6FX											
M3 × 0.5	P1	SNPP3.0GX	2.5P	46	9	14	26	4	3.2	6	3	1	△
	P2	SNPQ3.0GX											
	P3	SNPR3.0GX											
	P4	SNPS3.0GX											
M3.5 × 0.6	P1	SNPP3.5HX	2.5P	52	11	16	29	5	4	7	3	1	△
M4 × 0.7	P2	SNPQ4.0IX	2.5P	52	11	17	29	5	4	7	3	1	○
	P3	SNPR4.0IX											△
	P4	SNPS4.0IX											△
M5 × 0.8	P2	SNPQ5.0KX	2.5P	60	13	22	33	5.5	4.5	7	3	1	○
	P3	SNPR5.0KX											△
	P4	SNPS5.0KX											△
M6 × 1	P2	SNPQ6.0MX	2.5P	62	15	26	33	6	4.5	7	3	1	○
	P3	SNPR6.0MX											△
	P4	SNPS6.0MX											△

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

SP LH

Spiral Fluted Taps for Left Hand Threads

Specification

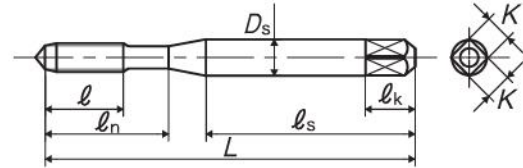


Recommended Tapping Speeds depending on Materials

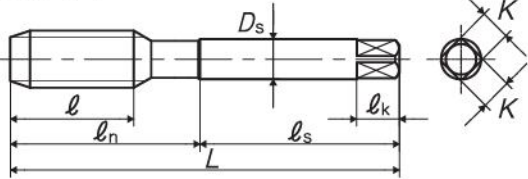
Medium carbon steels
中炭鋼
5~10
(m/min)

For icon explanation, refer to P.24

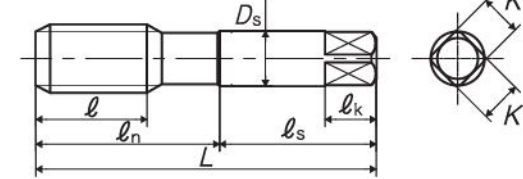
TYPE:1



TYPE:2



TYPE:3



Segment : 1C

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	Stock
For Metric Threads													
M2 × 0.4	P1	SPP2.0E--L	2.5P	42	7.2	12	27	3	2.5	5	2	1	△
M2.3 × 0.4	P1	SPP2.3E--L	2.5P	42	7.2	12	27	3	2.5	5	2	1	△
M2.5 × 0.45	P1	SPP2.5F--L	2.5P	46	8.1	14	29	3	2.5	5	2	1	△
M2.6 × 0.45	P1	SPP2.6F--L	2.5P	46	8.1	14	29	3	2.5	5	2	1	△
M3 × 0.5	P1	SPP3.0G--L	2.5P	46	9	14	26	4	3.2	6	3	1	○
M4 × 0.7	P2	SPQ4.0I--L	2.5P	52	11	17	29	5	4	7	3	1	○
M5 × 0.8	P2	SPQ5.0K--L	2.5P	60	13	22	33	5.5	4.5	7	3	1	○
M6 × 1	P2	SPQ6.0M--L	2.5P	62	15	26	33	6	4.5	7	3	1	○
M7 × 1	P2	SPQ7.0M--L	2.5P	70	19	-	36	6.2	5	8	3	2	△
M8 × 1.25	P2	SPQ8.0N--L	2.5P	70	19	-	36	6.2	5	8	3	2	○
M8 × 1	P2	SPQ8.0M--L	2.5P	70	19	-	36	6.2	5	8	3	2	△
M10 × 1.5	P2	SPQ0100--L	2.5P	75	23	-	38	7	5.5	8	3	2	○
M10 × 1.25	P2	SPQ010N--L	2.5P	75	23	-	38	7	5.5	8	3	2	○
M10 × 1	P2	SPQ010M--L	2.5P	75	23	-	38	7	5.5	8	3	2	△
M12 × 1.75	P2	SPQ012P--L	2.5P	82	26	-	42	8.5	6.5	9	3	2	○
M12 × 1.5	P2	SPQ0120--L	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
M12 × 1.25	P2	SPQ012N--L	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
M12 × 1	P2	SPQ012M--L	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
M14 × 2	P2	SPQ014Q--L	2.5P	88	26	-	45	10.5	8	11	3	2	△
M14 × 1.5	P2	SPQ0140--L	2.5P	88	26	-	45	10.5	8	11	3	2	△
M16 × 2	P2	SPQ016Q--L	2.5P	95	26	-	48	12.5	10	13	3	2	○
M16 × 1.5	P2	SPQ0160--L	2.5P	95	26	-	48	12.5	10	13	3	2	△
M18 × 2.5	P3	SPR018R--L	2.5P	100	33	-	51	14	11	14	4	2	△

○=Standard ○=Semi standard △=Made to order
For improvement, spec may change without advance notice.

Think threads with
YAMAWA

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

SP-20

SP LH Spiral Fluted 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
M18 × 1.5	P2	SPQ0180--L	2.5P	100	33	-	51	14	11	14	4	2	△
M20 × 2.5	P3	SPR020R--L	2.5P	105	33	-	50	15	12	15	4	3	○
M20 × 1.5	P3	SPR0200--L	2.5P	105	33	-	50	15	12	15	4	3	△
M22 × 2.5	P3	SPR022R--L	2.5P	115	33	-	55	17	13	16	4	3	△
M22 × 1.5	P3	SPR0220--L	2.5P	115	33	-	55	17	13	16	4	3	△
M24 × 3	P3	SPR024S--L	2.5P	120	39	-	55	19	15	18	4	3	○
M24 × 1.5	P3	SPR0240--L	2.5P	120	39	-	55	19	15	18	4	3	△
M27 × 3	P3	SPR027S--L	2.5P	130	39	-	60	20	15	18	4	3	△
M30 × 3.5	P4	SPS030T--L	2.5P	135	46	-	62	23	17	20	4	3	△
M30 × 2	P3	SPR030Q--L	2.5P	135	46	-	62	23	17	20	4	3	△
M30 × 1.5	P3	SPR0300--L	2.5P	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	SPQU04N--L	2.5P	62	15	26	33	6	4.5	7	3	1	△
1/4-28UNF	P2	SPQU04K--L	2.5P	62	15	26	33	6	4.5	7	3	1	△
5/16-18UNC	P2	SPQU050--L	2.5P	70	19	-	36	6.2	5	8	3	2	△
5/16-24UNF	P2	SPQU05M--L	2.5P	70	19	-	36	6.2	5	8	3	2	△
3/8-16UNC	P2	SPQU06P--L	2.5P	75	23	-	38	7	5.5	8	3	2	△
3/8-24UNF	P2	SPQU06M--L	2.5P	75	23	-	38	7	5.5	8	3	2	△
7/16-14UNC	P3	SPRU07Q--L	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
7/16-20UNF	P2	SPQU07N--L	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
1/2-13UNC	P3	SPRU08R--L	2.5P	88	26	-	45	10.5	8	11	3	2	△
1/2-20UNF	P2	SPQU08N--L	2.5P	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	P2	SPQW04N--L	2.5P	62	15	26	33	6	4.5	7	3	1	△
5/16W18	P2	SPQW050--L	2.5P	70	19	-	36	6.2	5	8	3	2	△
3/8W16	P2	SPQW06P--L	2.5P	75	23	-	38	7	5.5	8	3	2	△
7/16W14	P3	SPRW07Q--L	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
1/2W12	P3	SPRW08S--L	2.5P	88	26	-	45	10.5	8	11	3	2	△
5/8W11	P3	SPRW10U--L	2.5P	95	26	-	48	12.5	10	13	3	2	△
3/4W10	P3	SPRW12V--L	2.5P	105	33	-	50	15	12	15	4	3	△

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

SP V

Spiral Fluted Taps, Coated Specification

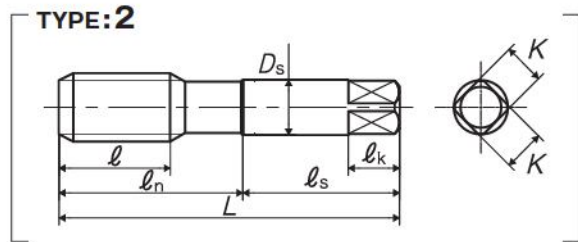
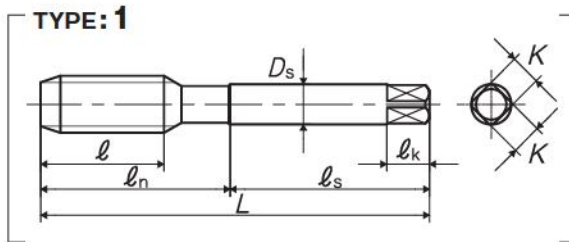


■ Adopting the optimum coating for the tapping condition.

Recommended Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼
10~20 (m/min)	10~20 (m/min)	10~20 (m/min)	10~20 (m/min)

For icon explanation, refer to P.24



Segment : 1C

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	Stock
For Metric Threads													
M14 × 2	P2	VSPQ014Q	2.5P	88	26	-	45	10.5	8	11	3	1	○
M16 × 2	P2	VSPQ016Q	2.5P	95	26	-	48	12.5	10	13	3	1	○
M20 × 2.5	P3	VSPR020R	2.5P	105	33	-	50	15	12	15	4	2	○

AU+SP

Plus Series Spiral Fluted Taps, Optimum Coating for the tapping Specification



Recommended Tapping Speeds depending on Materials

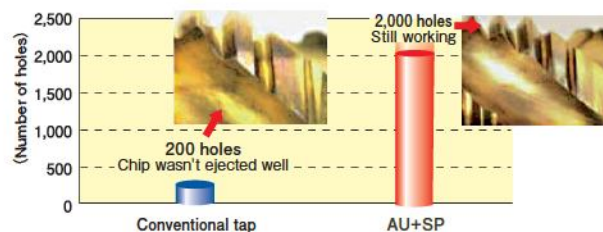
Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼
10~20 (m/min)	10~20 (m/min)	10~20 (m/min)	10~20 (m/min)
Stainless steels ステンレス鋼	Aluminum alloy castings アルミ合金鋳物	Zinc alloy castings 亜鉛合金鋳物	
5~10 (m/min)	20~30 (m/min)	20~30 (m/min)	

For icon explanation, refer to P.24

Tapping data

Tapping condition (M6×1)

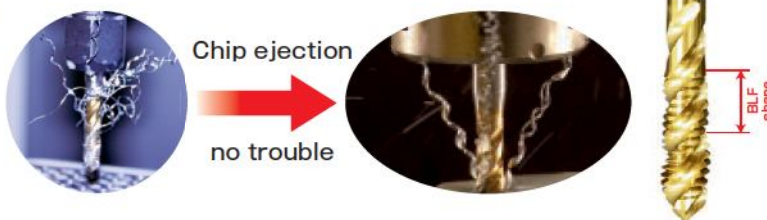
Work material	SCM440
Tapping speed	10m/min
Hole diameter	φ5.0
Tapping length	9mm, blind hole
Machine	Machining center vertical type (Floating holder used)
Tapping fluid	Water soluble cutting oil (Chlorine-free, 20 fold dilution)



Product features

BLF (thread portion of special design) + proprietary flute design :
Great improvement in chip ejection efficiency.

- AU+SP has a special thread portion design with thread crests ground off and a few full threads after chamfer left unchanged.
- Effects of AU+SP are as follows:
 - Prevention of chipping trouble at full thread portion
 - Reduction of tapping torque and tapping friction
 - Good chip ejection



Change of marking position from shank into square portion

Laser marking can roughen the shank surface.

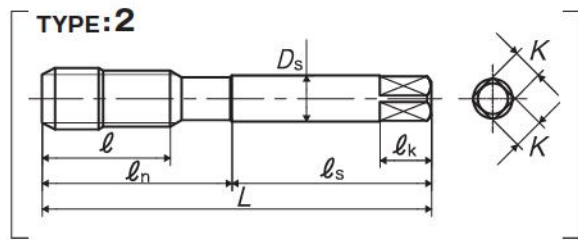
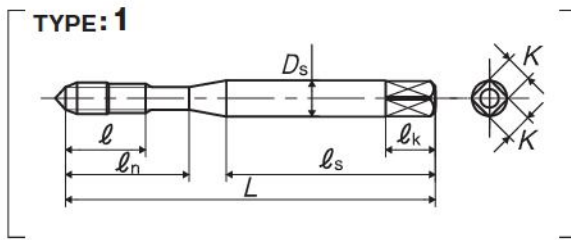
In order to keep high accuracy of shank circularity and diameter, marking has been transferred from shank to square portion.



For wide range of materials

Adopting the flute of special design which enables the coating (features: wear resistance, heat resistance, and welding resistance) to work most efficiently, AU+SP is suitable for the wide range of materials and is well applicable under water soluble oil.

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



Segment : 1C

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	Stock
For Metric Threads													
M2 × 0.4	P2	VSAPQ2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	1	○
M2.5 × 0.45	P2	VSAPQ2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	1	○
M2.6 × 0.45	P2	VSAPQ2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	1	○
M3 × 0.5	P2	VSAPQ3.0G	2.5P	46	9	14	26	4	3.2	6	3	1	◎
M4 × 0.7	P2	VSAPQ4.0I	2.5P	52	11	17	29	5	4	7	3	1	◎
M5 × 0.8	P2	VSAPQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	1	◎
M6 × 1	P2	VSAPQ6.0M	2.5P	62	15	26	33	6	4.5	7	3	1	◎
M8 × 1.25	P3	VSAPR8.0N	2.5P	70	19	-	36	6.2	5	8	3	2	◎
M8 × 1	P3	VSAPR8.0M	2.5P	70	19	-	36	6.2	5	8	3	2	○
M10 × 1.5	P3	VSAPR010O	2.5P	75	23	-	38	7	5.5	8	4	2	◎
M10 × 1.25	P3	VSAPR010N	2.5P	75	23	-	38	7	5.5	8	4	2	◎
M10 × 1	P3	VSAPR010M	2.5P	75	23	-	38	7	5.5	8	4	2	○
M12 × 1.75	P3	VSAPR012P	2.5P	82	26	-	42	8.5	6.5	9	4	2	◎
M12 × 1.5	P3	VSAPR012O	2.5P	82	26	-	42	8.5	6.5	9	4	2	◎
M12 × 1.25	P3	VSAPR012N	2.5P	82	26	-	42	8.5	6.5	9	4	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



AUXSP

X Series Spiral Fluted Taps, Coated

Specification



Recommended Tapping Speeds depending on Materials

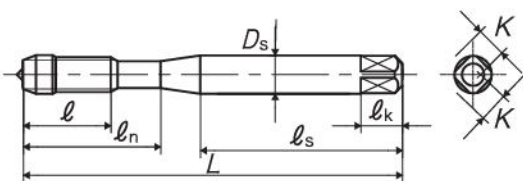
Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼
10~25 (m/min)	10~25 (m/min)	10~25 (m/min)	10~25 (m/min)

Stainless steels ステンレス鋼	Aluminum alloy castings アルミ合金鋳物	Zinc alloy castings 亜鉛合金鋳物
10~15 (m/min)	20~30 (m/min)	20~30 (m/min)

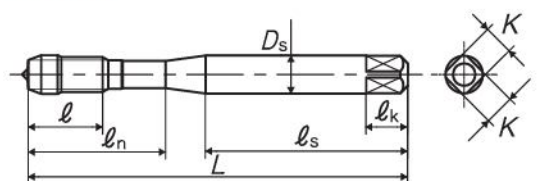
For icon explanation, refer to P.24
Use with dedicated toolings is recommended.

■Applying the blanks of high toughness and high accuracy, AUXSP derives the maximum performance from high facility machining centers and high precision toolings. Special thread portion design with thread crests ground off and a few full threads left unchanged. Combination of this design and the special flute geometry maintains good chip ejection and reduces friction. The Spiral Fluted Tap is adopting the optimum coating for the tapping condition.

TYPE:1



TYPE:2



Segment : 1C

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	VSAXQ6.0M	2.5P	80	15	30	45	6	4.9	8	3	1	○
M8 × 1.25	P3	VSAXR8.0N	2.5P	90	19	35	48	8	6.2	9	3	1	○
M8 × 1	P3	VSAXR8.0M	2.5P	90	15	35	48	8	6.2	9	3	2	○
M10 × 1.5	P3	VSAXR0100	2.5P	100	23	39	53	10	8	11	4	1	○
M10 × 1.25	P3	VSAXR010N	2.5P	100	19	39	53	10	8	11	4	2	○
M10 × 1	P3	VSAXR010M	2.5P	100	15	39	53	10	8	11	4	2	○
M12 × 1.75	P3	VSAXR012P	2.5P	110	26	45	56	12	9	12	4	1	○
M12 × 1.5	P3	VSAXR0120	2.5P	110	23	45	56	12	9	12	4	2	○
M12 × 1.25	P3	VSAXR012N	2.5P	110	19	45	56	12	9	12	4	2	○

Note:

- Please use tapping holders suitable for the shank diameter and square of DIN371 for M6~M10 and those of M16 (DIN376) for M12.
- Overall length, shank diameter and square of metric coarse series are adopted for those of metric fine series.

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

LS-SP

Long Shank Spiral Fluted Taps

Specification



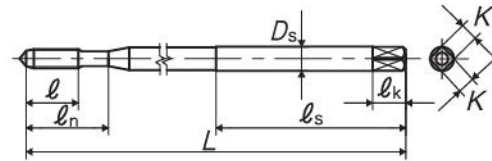
Recommended Tapping Speeds depending on Materials

Medium carbon steels
中炭鋼
5~10
(m/min)

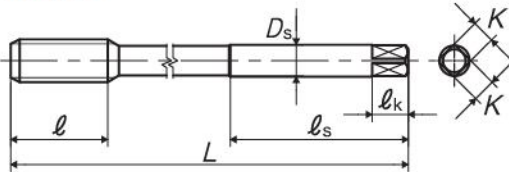
For icon explanation, refer to P.24



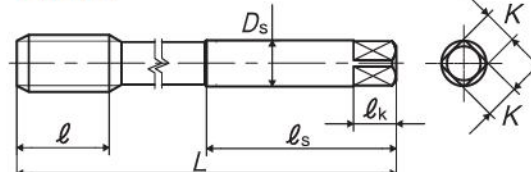
TYPE:1



TYPE:2



TYPE:3



Oversize
Segment : 1C

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	Stock
For Metric Threads													
M2 × 0.4	P1	SPP2.0EL07	2.5P	70	7.2	12	55	3	2.5	5	2	1	△
		SPP2.0EL10		100			85						△
M2.3 × 0.4	P1	SPP2.3EL07	2.5P	70	7.2	12	55	3	2.5	5	2	1	△
		SPP2.3EL10		100			85						△
M2.5 × 0.45	P1	SPP2.5FL07	2.5P	70	8.1	14	53	3	2.5	5	2	1	△
		SPP2.5FL10		100			83						△
M2.6 × 0.45	P1	SPP2.6FL07	2.5P	70	8.1	14	53	3	2.5	5	2	1	△
		SPP2.6FL10		100			83						△
M3 × 0.5	P1	SPP3.0GL07	2.5P	70	9	14	50	4	3.2	6	3	1	△
		SPP3.0GL10		100									○
		SPP3.0GL12		120									△
		SPP3.0GL15		150									◎
	P2	SPQ3.0GL10		100			40						△
		SPQ3.0GL15		150									△
	P3	SPR3.0GL10		100									△
		SPR3.0GL15		150									△
													△
M4 × 0.7	P2	SPQ4.0IL07	2.5P	70	11	17	47	5	4	7	3	1	△
		SPQ4.0IL10		100									△
		SPQ4.0IL12		120									△
		SPQ4.0IL15		150			40						◎
	P3	SPR4.0IL10		100									△
		SPR4.0IL15		150									△
													△

◎=Standard ○=Semi standard △=Made to order
For improvement, spec may change without advance notice.

Think threads with
YAMAWA

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

SP-26

51

Spiral Fluted Tap Series for blind hole

LS-SP Long Shank Spiral Fluted 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	SPQ5.0KL10	2.5P	100	13	22	40	5.5	4.5	7	3	1	○
		SPQ5.0KL12		120									△
		SPQ5.0KL15		150									△
	P3	SPR5.0KL10		100									△
		SPR5.0KL15		150									△
M6 × 1	P2	SPQ6.0ML10	2.5P	100	15	26	40	6	4.5	7	3	1	○
		SPQ6.0ML12		120									△
		SPQ6.0ML15		150									○
		SPQ6.0ML20		200									○
	P3	SPR6.0ML10		100									△
		SPR6.0ML15		150									△
M6 × 0.75	P2	SPQ6.0JL10	2.5P	100	15	26	40	6	4.5	7	3	1	△
M8 × 1.25	P2	SPQ8.0NL10	2.5P	100	19	-	50	6.2	5	8	3	2	○
		SPQ8.0NL12		120									○
		SPQ8.0NL15		150									○
		SPQ8.0NL20		200									○
	P3	SPR8.0NL10		100									△
		SPR8.0NL15		150									△
M8 × 1	P2	SPQ8.0ML10	2.5P	100	19	-	50	6.2	5	8	3	2	△
		SPQ8.0ML15		150									△
M10 × 1.5	P2	SPQ0100L10	2.5P	100	23	-	50	7	5.5	8	3	2	○
		SPQ0100L12		120									○
		SPQ0100L15		150									○
		SPQ0100L20		200									○
	P3	SPR0100L10		100									△
		SPR0100L15		150									△
M10 × 1.25	P2	SPQ010NL10	2.5P	100	23	-	50	7	5.5	8	3	2	○
		SPQ010NL12		120									○
		SPQ010NL15		150									○
		SPQ010NL20		200									○
M10 × 1	P2	SPQ010ML10	2.5P	100	23	-	50	7	5.5	8	3	2	△
		SPQ010ML15		150									△
M12 × 1.75	P2	SPQ012PL10	2.5P	100	26	-	50	8.5	6.5	9	3	2	△
		SPQ012PL12		120									○
		SPQ012PL15		150									△
		SPQ012PL20		200									○
	P3	SPR012PL15		150									△
M12 × 1.5	P2	SPQ012OL10	2.5P	100	26	-	50	8.5	6.5	9	3	2	△
		SPQ012OL15		150									△
		SPQ012OL20		200									△
M12 × 1.25	P2	SPQ012NL10	2.5P	100	26	-	50	8.5	6.5	9	3	2	△
		SPQ012NL12		120									○
		SPQ012NL15		150									△
		SPQ012NL20		200									○
M12 × 1	P2	SPQ012ML12	2.5P	120	26	-	50	8.5	6.5	9	3	2	△
		SPQ012ML15		150									△
M14 × 2	P2	SPQ014QL12	2.5P	120	26	-	60	10.5	8	11	3	2	△
		SPQ014QL15		150									○
		SPQ014QL20		200									○
M14 × 1.5	P2	SPQ014OL12	2.5P	120	26	-	60	10.5	8	11	3	2	△

SP-27



Think threads with
 ○=Standard ○=Semi standard △=Made to order
 For improvement, spec may change without advance notice.

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-SP Long Shank Spiral Fluted 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 × 1.5	P2	SPQ0140L15 SPQ0140L20	2.5P	150 200	26	-	60	10.5	8	11	3	2	△ ○
M16 × 2	P2	SPQ0160L15 SPQ0160L20 SPQ0160L25	2.5P	150 200 250	26	-	60	12.5	10	13	3	2	◎ △ ◎
M16 × 1.5	P2	SPQ0160L15 SPQ0160L20	2.5P	150 200	26	-	60	12.5	10	13	3	2	○
M18 × 2.5	P3	SPR018RL15 SPR018RL20 SPR018RL25	2.5P	150 200 250	33	-	70	14	11	14	4	2	○ △
M18 × 1.5	P2	SPQ0180L15 SPQ0180L20	2.5P	150 200	33	-	70	14	11	14	4	2	○
M20 × 2.5	P3	SPR020RL15 SPR020RL20 SPR020RL25	2.5P	150 200 250	33	-	70	15	12	15	4	3	◎ △ ◎
M20 × 1.5	P3	SPR0200L15 SPR0200L20	2.5P	150 200	33	-	70	15	12	15	4	3	○
M22 × 2.5	P3	SPR022RL15 SPR022RL20	2.5P	150 200	33	-	70	17	13	16	4	3	△
M22 × 1.5	P3	SPR0220L15 SPR0220L20	2.5P	150 200	33	-	70	17	13	16	4	3	○
M24 × 3	P3	SPR024SL15 SPR024SL20 SPR024SL25	2.5P	150 200 250	39	-	80	19	15	18	4	3	○ △ ◎
M24 × 2	P3	SPR024QL20	2.5P	200	39	-	80	19	15	18	4	3	△
M24 × 1.5	P3	SPR0240L15 SPR0240L20	2.5P	150 200	39	-	80	19	15	18	4	3	○
M27 × 3	P3	SPR027SL20 SPR027SL25	2.5P	200 250	39	-	80	20	15	18	4	3	△
M27 × 2	P3	SPR027QL20	2.5P	200	39	-	80	20	15	18	4	3	△
M27 × 1.5	P3	SPR0270L20 SPR0270L25	2.5P	200 250	39	-	80	20	15	18	4	3	△
M30 × 3.5	P4	SPS030TL20 SPS030TL25 SPS030TL30	2.5P	200 250 300	46	-	80	23	17	20	4	3	△
M30 × 1.5	P3	SPR0300L20 SPR0300L25	2.5P	200 250	46	-	80	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	SPQU04NL10 SPQU04NL15	2.5P	100 150	15	26	40	6	4.5	7	3	1	△
1/4-28UNF	P2	SPQU04KL10 SPQU04KL15	2.5P	100 150	15	26	40	6	4.5	7	3	1	△
5/16-18UNC	P2	SPQU050L10 SPQU050L15	2.5P	100 150	19	-	50	6.2	5	8	3	2	△
5/16-24UNF	P2	SPQU05ML10 SPQU05ML15	2.5P	100 150	19	-	50	6.2	5	8	3	2	△
3/8-16UNC	P2	SPQU06PL10 SPQU06PL15 SPQU06PL20	2.5P	100 150 200	23	-	50	7	5.5	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

Centering Tools

Centering Tools

Centering Tools

Centering Tools

Spiral Fluted Tap Series for blind hole

LS-SP Long Shank Spiral Fluted Taps

Spiral Fluted Taps (for blind hole)	Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
	3/8-24UNF	P2	SPQU06ML10	2.5P	100	23	-	50	7	5.5	8	3	2	△
			SPQU06ML15		150									
	7/16-14UNC	P3	SPRU07QL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
	7/16-20UNF	P2	SPQU07NL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
	1/2-13UNC	P3	SPRU08RL15	2.5P	150	26	-	60	10.5	8	11	3	2	△
			SPRU08RL20		200									
	1/2-20UNF	P2	SPQU08NL15	2.5P	150	26	-	60	10.5	8	11	3	2	△
	5/8-11UNC	P3	SPRU10UL15	2.5P	150	26	-	60	12.5	10	13	3	2	△
			SPRU10UL20		200									
	5/8-18UNF	P2	SPQU10OL15	2.5P	150	26	-	60	12.5	10	13	3	2	△
	3/4-10UNC	P3	SPRU12VL15	2.5P	150	33	-	70	15	12	15	4	3	△
			SPRU12VL20		200									
	3/4-16UNF	P3	SPRU12PL15	2.5P	150	33	-	70	15	12	15	4	3	△
7/8-9UNC	P3	SPRU14WL15	2.5P	150	33	-	70	17	13	16	4	3	△	
		SPRU14WL20		200										
1 -8UNC	P3	SPRU16XL15	2.5P	150	39	-	80	19	15	18	4	3	△	
		SPRU16XL20		200										
For Whitworth Threads														
Spiral Fluted Taps (for through hole)	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	P2	SPQW04NL10	2.5P	100	15	26	40	6	4.5	7	3	1	△
			SPQW04NL15		150									
	5/16W18	P2	SPQW05OL10	2.5P	100	19	-	50	6.2	5	8	3	2	△
			SPQW05OL15		150									
	3/8W16	P2	SPQW06PL10	2.5P	100	23	-	50	7	5.5	8	3	2	△
			SPQW06PL15		150									
			SPQW06PL20		200									
	7/16W14	P3	SPRW07QL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
	1/2W12	P3	SPRW08SL15	2.5P	150	26	-	60	10.5	8	11	3	2	△
			SPRW08SL20		200									
	5/8W11	P3	SPRW10UL15	2.5P	150	26	-	60	12.5	10	13	3	2	△
			SPRW10UL20		200									
	3/4W10	P3	SPRW12VL15	2.5P	150	33	-	70	15	12	15	4	3	△
SPRW12VL20			200											
7/8W9	P3	SPRW14WL15	2.5P	150	33	-	70	17	13	16	4	3	△	
		SPRW14WL20		200										
1 W8	P3	SPRW16XL15	2.5P	150	39	-	80	19	15	18	4	3	△	
		SPRW16XL20		200										
Spiral Pointed Taps (for through hole)	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	P2	SPQW04NL10	2.5P	100	15	26	40	6	4.5	7	3	1	△
			SPQW04NL15		150									
	5/16W18	P2	SPQW05OL10	2.5P	100	19	-	50	6.2	5	8	3	2	△
			SPQW05OL15		150									
	3/8W16	P2	SPQW06PL10	2.5P	100	23	-	50	7	5.5	8	3	2	△
			SPQW06PL15		150									
			SPQW06PL20		200									
	7/16W14	P3	SPRW07QL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
	1/2W12	P3	SPRW08SL15	2.5P	150	26	-	60	10.5	8	11	3	2	△
			SPRW08SL20		200									
	5/8W11	P3	SPRW10UL15	2.5P	150	26	-	60	12.5	10	13	3	2	△
			SPRW10UL20		200									
	3/4W10	P3	SPRW12VL15	2.5P	150	33	-	70	15	12	15	4	3	△
SPRW12VL20			200											
7/8W9	P3	SPRW14WL15	2.5P	150	33	-	70	17	13	16	4	3	△	
		SPRW14WL20		200										
1 W8	P3	SPRW16XL15	2.5P	150	39	-	80	19	15	18	4	3	△	
		SPRW16XL20		200										
Hand Taps	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	P2	SPQW04NL10	2.5P	100	15	26	40	6	4.5	7	3	1	△
			SPQW04NL15		150									
	5/16W18	P2	SPQW05OL10	2.5P	100	19	-	50	6.2	5	8	3	2	△
			SPQW05OL15		150									
	3/8W16	P2	SPQW06PL10	2.5P	100	23	-	50	7	5.5	8	3	2	△
			SPQW06PL15		150									
			SPQW06PL20		200									
	7/16W14	P3	SPRW07QL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
	1/2W12	P3	SPRW08SL15	2.5P	150	26	-	60	10.5	8	11	3	2	△
			SPRW08SL20		200									
	5/8W11	P3	SPRW10UL15	2.5P	150	26	-	60	12.5	10	13	3	2	△
			SPRW10UL20		200									
	3/4W10	P3	SPRW12VL15	2.5P	150	33	-	70	15	12	15	4	3	△
SPRW12VL20			200											
7/8W9	P3	SPRW14WL15	2.5P	150	33	-	70	17	13	16	4	3	△	
		SPRW14WL20		200										
1 W8	P3	SPRW16XL15	2.5P	150	39	-	80	19	15	18	4	3	△	
		SPRW16XL20		200										
Cemented Carbide Taps	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	P2	SPQW04NL10	2.5P	100	15	26	40	6	4.5	7	3	1	△
			SPQW04NL15		150									
	5/16W18	P2	SPQW05OL10	2.5P	100	19	-	50	6.2	5	8	3	2	△
			SPQW05OL15		150									
	3/8W16	P2	SPQW06PL10	2.5P	100	23	-	50	7	5.5	8	3	2	△
			SPQW06PL15		150									
			SPQW06PL20		200									
	7/16W14	P3	SPRW07QL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
	1/2W12	P3	SPRW08SL15	2.5P	150	26	-	60	10.5	8	11	3	2	△
			SPRW08SL20		200									
	5/8W11	P3	SPRW10UL15	2.5P	150	26	-	60	12.5	10	13	3	2	△
			SPRW10UL20		200									
	3/4W10	P3	SPRW12VL15	2.5P	150	33	-	70	15	12	15	4	3	△
SPRW12VL20			200											
7/8W9	P3	SPRW14WL15	2.5P	150	33	-	70	17	13	16	4	3	△	
		SPRW14WL20		200										
1 W8	P3	SPRW16XL15	2.5P	150	39	-	80	19	15	18	4	3	△	
		SPRW16XL20		200										
Roll Taps	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	P2	SPQW04NL10	2.5P	100	15	26	40	6	4.5	7	3	1	△
			SPQW04NL15		150									
	5/16W18	P2	SPQW05OL10	2.5P	100	19	-	50	6.2	5	8	3	2	△
			SPQW05OL15		150									
	3/8W16	P2	SPQW06PL10	2.5P	100	23	-	50	7	5.5	8	3	2	△
			SPQW06PL15		150									
			SPQW06PL20		200									
	7/16W14	P3	SPRW07QL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
	1/2W12	P3	SPRW08SL15	2.5P	150	26	-	60	10.5	8	11	3	2	△
			SPRW08SL20		200									
	5/8W11	P3	SPRW10UL15	2.5P	150	26	-	60	12.5	10	13	3	2	△
			SPRW10UL20		200									
	3/4W10	P3	SPRW12VL15	2.5P	150	33	-	70	15	12	15	4	3	△
SPRW12VL20			200											
7/8W9	P3	SPRW14WL15	2.5P	150	33	-	70	17	13	16	4	3	△	
		SPRW14WL20		200										
1 W8	P3	SPRW16XL15	2.5P	150	39	-	80	19	15	18	4	3	△	
		SPRW16XL20		200										
Special Thread Taps Simple Inspection Tools	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	P2	SPQW04NL10	2.5P	100	15	26	40	6	4.5	7	3	1	△
			SPQW04NL15		150									
	5/16W18	P2	SPQW05OL10	2.5P	100	19	-	50	6.2	5	8	3	2	△
			SPQW05OL15		150									
	3/8W16	P2	SPQW06PL10	2.5P	100	23	-	50	7	5.5	8	3	2	△
			SPQW06PL15		150									
			SPQW06PL20		200									
	7/16W14	P3	SPRW07QL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
	1/2W12	P3	SPRW08SL15	2.5P	150	26	-	60	10.5	8	11	3	2	△
			SPRW08SL20		200									
	5/8W11	P3	SPRW10UL15	2.5P	150	26	-	60	12.5	10	13	3	2	△
			SPRW10UL20		200									
	3/4W10	P3	SPRW12VL15	2.5P	150	33	-	70	15	12	15	4	3	△
SPRW12VL20			200											
7/8W9	P3	SPRW14WL15	2.5P	150	33	-	70	17	13	16	4	3	△	
		SPRW14WL20		200										
1 W8	P3	SPRW16XL15	2.5P	150	39	-	80	19	15	18	4	3	△	
		SPRW16XL20		200										
Pipe Taps	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	P2	SPQW04NL10	2.5P	100	15	26	40	6	4.5	7	3	1	△
			SPQW04NL15		150									
	5/16W18	P2	SPQW05OL10	2.5P	100	19	-	50	6.2	5	8	3	2	△
			SPQW05OL15		150									
	3/8W16	P2	SPQW06PL10	2.5P	100	23	-	50	7	5.5	8	3	2	△
			SPQW06PL15		150									
			SPQW06PL20		200									
	7/16W14	P3	SPRW07QL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
	1/2W12	P3	SPRW08SL15											

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

LS-SP LH

Long Shank Spiral Fluted Taps for Left Hand Threads

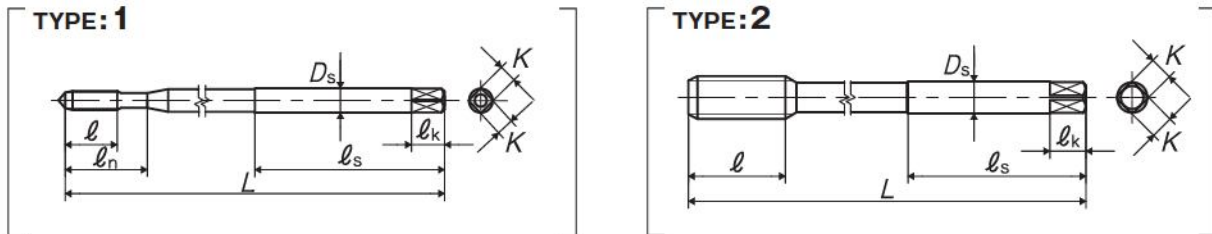
Specification



Recommended Tapping Speeds depending on Materials



For icon explanation, refer to P.24



Segment : 1C

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	Stock
For Metric Threads													
M3 × 0.5	P1	SPP3.0GL10L	2.5P	100	9	14	40	4	3.2	6	3	1	△
M4 × 0.7	P2	SPQ4.0IL10L	2.5P	100	11	17	40	5	4	7	3	1	△
M5 × 0.8	P2	SPQ5.0KL10L	2.5P	100	13	22	40	5.5	4.5	7	3	1	△
M6 × 1	P2	SPQ6.0ML10L	2.5P	100	15	26	40	6	4.5	7	3	1	△
		SPQ6.0ML15L		150									
M8 × 1.25	P2	SPQ8.0NL15-L	2.5P	150	19	-	50	6.2	5	8	3	2	△
M10 × 1.5	P2	SPQ0100L15-L	2.5P	150	23	-	50	7	5.5	8	3	2	△
M10 × 1.25	P2	SPQ010NL15-L	2.5P	150	23	-	50	7	5.5	8	3	2	△
M12 × 1.75	P2	SPQ012PL15-L	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
M12 × 1.5	P2	SPQ0120L15-L	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
M12 × 1.25	P2	SPQ012NL15-L	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
M14 × 2	P2	SPQ014QL15-L	2.5P	150	26	-	60	10.5	8	11	3	2	△
M14 × 1.5	P2	SPQ0140L15-L	2.5P	150	26	-	60	10.5	8	11	3	2	△
M16 × 2	P2	SPQ016QL15-L	2.5P	150	26	-	60	12.5	10	13	3	2	△
M16 × 1.5	P2	SPQ0160L15-L	2.5P	150	26	-	60	12.5	10	13	3	2	△

LS-SP V

Long Shank Spiral Fluted Taps, Coated
Specification



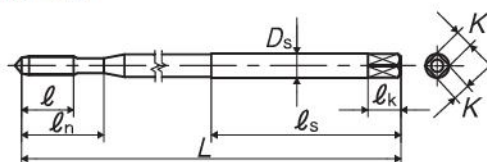
■ Adopting the optimum coating for the tapping condition.

Recommended Tapping Speeds depending on Materials

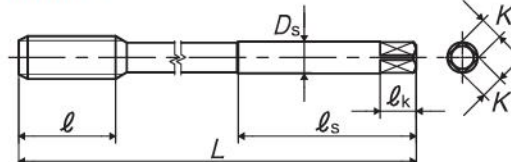
Low carbon steels 低碳鋼	Medium carbon steels 中炭鋼	High carbon steels 高炭鋼	Alloy steels 合金鋼
10~20 (m/min)	10~20 (m/min)	10~20 (m/min)	10~20 (m/min)

For icon explanation, refer to P.24

TYPE:1



TYPE:2



Segment : 1C

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	P1	VSP3.0GL10	2.5P	100	9	14	40	4	3.2	6	3	1	○
M4 × 0.7	P2	VSP4.0IL10	2.5P	100	11	17	40	5	4	7	3	1	○
M5 × 0.8	P2	VSP5.0KL10	2.5P	100	13	22	40	5.5	4.5	7	3	1	○
M6 × 1	P2	VSP6.0ML10	2.5P	100	15	26	40	6	4.5	7	3	1	○
		VSP6.0ML15		150									△
M8 × 1.25	P2	VSP8.0NL10	2.5P	100	19	-	50	6.2	5	8	3	2	○
		VSP8.0NL15		150									○
M10 × 1.5	P2	VSP10.0L15	2.5P	150	23	-	50	7	5.5	8	3	2	○
M10 × 1.25	P2	VSP10.0NL15	2.5P	150	23	-	50	7	5.5	8	3	2	△
M12 × 1.75	P2	VSP12.0PL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	○
M12 × 1.5	P2	VSP12.0L15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
M12 × 1.25	P2	VSP12.0NL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△

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

LS-SP-K

Long Shank Spiral Fluted Taps with Neck
Specification

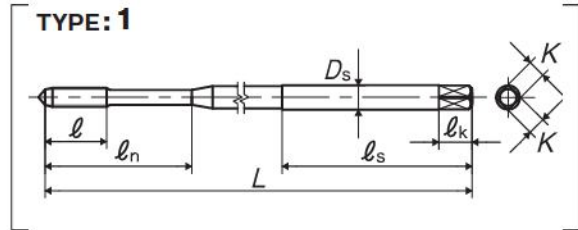


■ Having long neck design, LS-SP-K is the long shank spiral fluted tap enabling the tapping in rather deep holes.

Recommended Tapping Speeds depending on Materials

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

For icon explanation, refer to P.24



Segment : 1C

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	Stock
For Metric Threads													
M3 × 0.5	P1	-	2.5P	100	9	28	40	4	3.2	6	3	1	△
M4 × 0.7	P2	-	2.5P	100	11	31	40	5	4	7	3	1	△
M5 × 0.8	P2	-	2.5P	100	13	38	40	5.5	4.5	7	3	1	△
M6 × 1	P2	-	2.5P	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+SP/SU-SP

Spiral Fluted Taps for Stainless Steels

Specification



Recommended Tapping Speeds depending on Materials

Alloy steels 合金鋼	Stainless steels ステンレス鋼
~10 (m/min)	~10 (m/min)

For icon explanation, refer to P.24

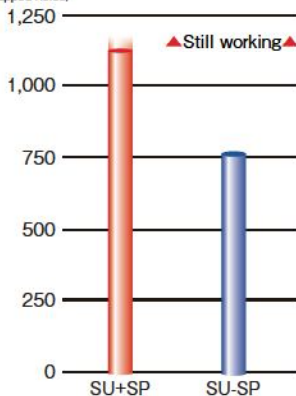
SU+SP	~ M6 (coarse thread)
SU-SP	~ M1.7, M8~, all U, all W

Product features

- Most suitable for stainless steels, sticky and tending to work-harden, as well as chrome steels and molybdenum steels, blind hole use.
- Reduction of cutting load on each cutting edge due to optimum design of thread portion.
- Decrease of cutting resistance and increase of tool life.
- Improvement of chip ejection and good thread finish.
- Increase of tool life due to the improvement of tap strength.
- Suitable for both rigid tapping machine and non-rigid tapping machine.

Comparison of tool life

(Number of tapped holes)

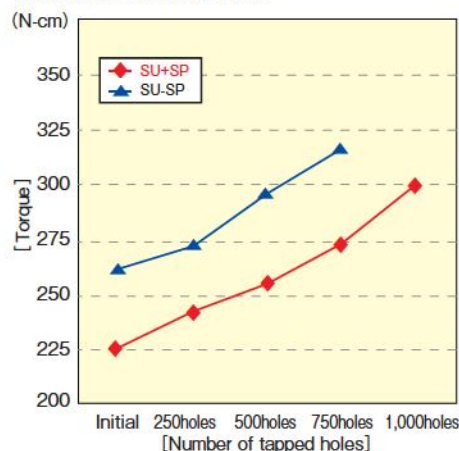


Tapping data

Tapping condition (M6×1)

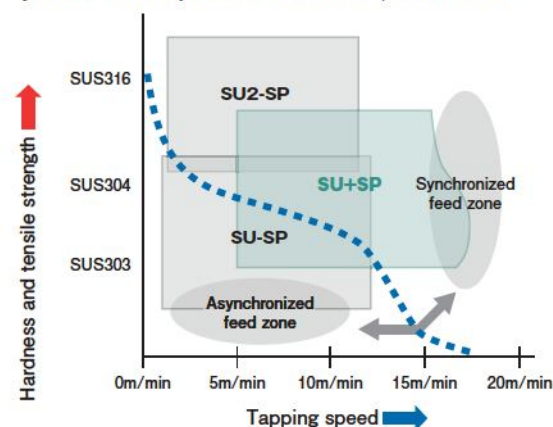
Work material	SUS304(90HRB)
Tapping speed	8m/min
Hole size	φ5.0
Tapping length	9mm, blind hole
Machine	Vertical machining center (with rigid feed)
Tapping fluid	Insoluble oil without chlorine

Transition of tapping torque



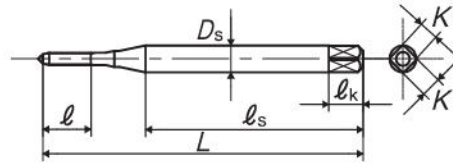
Products System

System table of taps for stainless steels, blind hole use

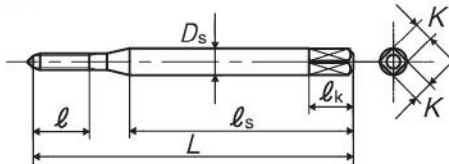


Overall length	Chamfer+ full thread	Thread length	Thread+Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓt	ℓ	ℓn	ℓs	Ds	K	ℓk

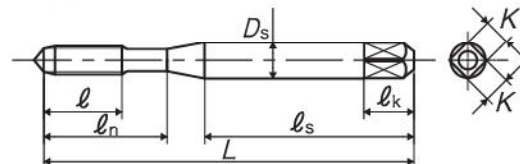
TYPE:1



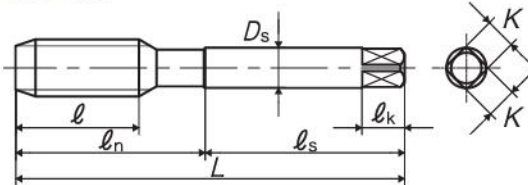
TYPE:2



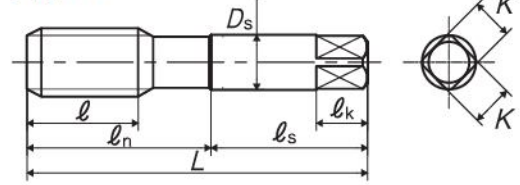
TYPE:3



TYPE:4



TYPE:5



Oversize
Segment : 1C

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	SUMP1.4C	2.5P	36	5.4	-	24	3	2.5	5	2	1	△
M1.7 × 0.35	P1	SUMP1.7D	2.5P	36	6.3	-	24	3	2.5	5	2	2	△
	P2	SUMQ1.7D											
M2 × 0.4	P1	SUPP2.0E											○
	P2	SUPQ2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	3	△
	P3	SUPR2.0E											
M2.3 × 0.4	P1	SUPP2.3E											
	P2	SUPQ2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	3	△
	P3	SUPR2.3E											
M2.5 × 0.45	P1	SUPP2.5F											○
	P2	SUPQ2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	3	△
	P3	SUPR2.5F											
M2.6 × 0.45	P1	SUPP2.6F											○
	P2	SUPQ2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	3	△
	P3	SUPR2.6F											
M3 × 0.5	P1	SUPP3.0G											○
	P2	SUPQ3.0G	2.5P	46	9	14	26	4	3.2	6	3	3	△
	P3	SUPR3.0G											
3M0.6	P1	SUPP3.0H	2.5P	46	9	14	26	4	3.2	6	3	3	△
M3.5 × 0.6	P1	SUPP3.5H											
	P3	SUPR3.5H	2.5P	52	11	16	29	5	4	7	3	3	△
M4 × 0.7	P2	SUPQ4.0I											○
	P3	SUPR4.0I	2.5P	52	11	17	29	5	4	7	3	3	△
	P4	SUP4.0I											

○=Standard ○=Semi standard △=Made to order
For improvement, spec may change without advance notice.

Think threads with
YAMAWA

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 Tap Series for blind hole

SU+SP/SU-SP Spiral Fluted 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
4M0.75	P2	SUPQ4.0J	2.5P	52	11	17	29	5	4	7	3	3	△
M5 × 0.8	P2	SUPQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	3	⊙
	P3	SUPR5.0K											△
	P4	SUPS5.0K											△
5M0.9	P2	SUPQ5.0L	2.5P	60	13	22	33	5.5	4.5	7	3	3	△
M6 × 1	P2	SUPQ6.0M	2.5P	62	15	26	33	6	4.5	7	3	3	⊙
	P3	SUPR6.0M											△
	P4	SUPS6.0M											△
M6 × 0.75	P2	SUMQ6.0J	2.5P	62	15	26	33	6	4.5	7	3	3	△
M8 × 1.25	P2	SUMQ8.0N	2.5P	70	19	-	36	6.2	5	8	3	4	⊙
	P3	SUMR8.0N											△
	P4	SUMS8.0N											△
M8 × 1	P2	SUMQ8.0M	2.5P	70	19	-	36	6.2	5	8	3	4	△
M8 × 0.75	P2	SUMQ8.0J	2.5P	70	19	-	36	6.2	5	8	3	4	△
M10 × 1.5	P2	SUMQ0100	2.5P	75	23	-	38	7	5.5	8	3	4	⊙
	P3	SUMR0100											△
	P4	SUMS0100											△
M10 × 1.25	P2	SUMQ010N	2.5P	75	23	-	38	7	5.5	8	3	4	○
	P3	SUMR010N											△
	P4	SUMS010N											△
M10 × 1	P2	SUMQ010M	2.5P	75	23	-	38	7	5.5	8	3	4	△
	P4	SUMS010M											△
M12 × 1.75	P2	SUMQ012P	2.5P	82	26	-	42	8.5	6.5	9	3	4	⊙
	P3	SUMR012P											△
	P4	SUMS012P											△
M12 × 1.5	P2	SUMQ012O	2.5P	82	26	-	42	8.5	6.5	9	3	4	○
	P3	SUMR012O											△
	P4	SUMS012O											△
M12 × 1.25	P2	SUMQ012N	2.5P	82	26	-	42	8.5	6.5	9	3	4	○
	P3	SUMR012N											△
M12 × 1	P2	SUMQ012M	2.5P	82	26	-	42	8.5	6.5	9	3	4	△
M14 × 2	P2	SUMQ014Q	2.5P	88	26	-	45	10.5	8	11	3	4	○
	P3	SUMR014Q											△
	P4	SUMS014Q											△
M14 × 1.5	P2	SUMQ014O	2.5P	88	26	-	45	10.5	8	11	3	4	○
	P4	SUMS014O											△
M14 × 1	P2	SUMQ014M	2.5P	88	26	-	45	10.5	8	11	3	4	△
M16 × 2	P2	SUMQ016Q	2.5P	95	26	-	48	12.5	10	13	3	4	⊙
	P3	SUMR016Q											△
	P4	SUMS016Q											△
M16 × 1.5	P2	SUMQ016O	2.5P	95	26	-	48	12.5	10	13	3	4	○
	P4	SUMS016O											△
M18 × 2.5	P3	SUMR018R	2.5P	100	33	-	51	14	11	14	4	4	○
	P4	SUMS018R											△
M18 × 1.5	P2	SUMQ018O	2.5P	100	33	-	51	14	11	14	4	4	○
	P4	SUMS018O											△
M20 × 2.5	P3	SUMR020R	2.5P	105	33	-	50	15	12	15	4	5	⊙
	P4	SUMS020R											△
M20 × 1.5	P3	SUMR020O	2.5P	105	33	-	50	15	12	15	4	5	○
	P4	SUMS020O											△

SP-35



Think threads with
For improvement, spec may change without advance notice.

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

SU+SP/SU-SP Spiral Fluted 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 × 2.5	P3	SUMR022R	2.5P	115	33	-	55	17	13	16	4	5	○
	P4	SUMS022R											△
	P5	SUMT022R											
M22 × 1.5	P3	SUMR022O	2.5P	115	33	-	55	17	13	16	4	5	△
	P4	SUMS022O											
M24 × 3	P3	SUMR024S	2.5P	120	39	-	55	19	15	18	4	5	○
	P4	SUMS024S											△
	P5	SUMT024S											
M24 × 1.5	P3	SUMR024O	2.5P	120	39	-	55	19	15	18	4	5	△
	P4	SUMS024O											
M27 × 3	P3	SUMR027S	2.5P	130	39	-	60	20	15	18	4	5	△
M27 × 1.5	P3	SUMR027O	2.5P	130	39	-	60	20	15	18	4	5	△
M30 × 3.5	P4	SUMS030T	2.5P	135	46	-	62	23	17	20	4	5	△
M30 × 1.5	P3	SUMR030O	2.5P	135	46	-	62	23	17	20	4	5	△
M33 × 3.5	P4	SUMS033T	2.5P	145	46	-	67	25	19	22	4	5	△
M36 × 4	P4	SUMS036U	2.5P	155	52	-	71	28	21	24	4	5	△
M39 × 4	P4	SUMS039U	2.5P	165	52	-	76	30	23	26	4	5	△
M42 × 4.5	P4	SUMS042V	2.5P	175	59	-	81	32	26	30	4	5	△
M42 × 1.5	P3	SUMR042O	2.5P	175	27	-	81	32	26	30	4	5	△
M45 × 4.5	P4	SUMS045V	2.5P	180	59	-	83	35	26	30	4	5	△
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.2-56UNC	P1	SUMPUN2E	2.5P	42	8.1	12	27	3	2.5	5	2	3	△
No.3-48UNC	P1	SUMPUN3F	2.5P	46	8.1	14	29	3	2.5	5	2	3	△
No.4-40UNC	P1	SUMPUN4H	2.5P	46	9	14	26	4	3.2	6	2	3	△
No.4-48UNF	P1	SUMPUN4F	2.5P	46	9	14	26	4	3.2	6	2	3	△
No.5-40UNC	P1	SUMPUN5H	2.5P	52	11	16	29	5	4	7	3	3	△
No.5-44UNF	P1	SUMPUN5G	2.5P	52	11	16	29	5	4	7	3	3	△
No.6-32UNC	P2	SUMQUN6J	2.5P	52	11	16	29	5	4	7	3	3	△
No.6-40UNF	P1	SUMPUN6H	2.5P	52	11	16	29	5	4	7	3	3	△
No.8-32UNC	P2	SUMQUN8J	2.5P	60	13	21	33	5.5	4.5	7	3	3	△
No.8-36UNF	P2	SUMQUN8I	2.5P	60	13	21	33	5.5	4.5	7	3	3	△
No.10-24UNC	P2	SUMQUNAM	2.5P	60	13	22	33	5.5	4.5	7	3	3	△
No.10-32UNF	P2	SUMQUNAJ	2.5P	60	13	22	33	5.5	4.5	7	3	3	△
1/4-20UNC	P2	SUMQU04N	2.5P	62	15	26	33	6	4.5	7	3	3	△
1/4-28UNF	P2	SUMQU04K	2.5P	62	15	26	33	6	4.5	7	3	3	△
5/16-18UNC	P2	SUMQU05O	2.5P	70	19	-	36	6.2	5	8	3	4	△
5/16-24UNF	P2	SUMQU05M	2.5P	70	19	-	36	6.2	5	8	3	4	△
3/8-16UNC	P2	SUMQU06P	2.5P	75	23	-	38	7	5.5	8	3	4	△
3/8-24UNF	P2	SUMQU06M	2.5P	75	23	-	38	7	5.5	8	3	4	△
7/16-14UNC	P3	SUMRU07Q	2.5P	82	26	-	42	8.5	6.5	9	3	4	△
7/16-20UNF	P2	SUMQU07N	2.5P	82	26	-	42	8.5	6.5	9	3	4	△
1/2-13UNC	P3	SUMRU08R	2.5P	88	26	-	45	10.5	8	11	3	4	△
1/2-20UNF	P2	SUMQU08N	2.5P	88	26	-	45	10.5	8	11	3	4	△
5/8-11UNC	P3	SUMRU10U	2.5P	95	26	-	48	12.5	10	13	3	4	△
5/8-18UNF	P2	SUMQU10O	2.5P	95	26	-	48	12.5	10	13	3	4	△
3/4-10UNC	P3	SUMRU12V	2.5P	105	33	-	50	15	12	15	4	5	△
3/4-16UNF	P3	SUMRU12P	2.5P	105	33	-	50	15	12	15	4	5	△
7/8-9UNC	P3	SUMRU14W	2.5P	115	33	-	55	17	13	16	4	5	△
7/8-14UNF	P3	SUMRU14Q	2.5P	115	33	-	55	17	13	16	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

SU+SP/SU-SP Spiral Fluted 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
1 -8UNC	P3	SUMRU16X	2.5P	125	39	-	58	19	15	18	4	5	△
1 -12UNF	P3	SUMRU16S	2.5P	125	39	-	58	19	15	18	4	5	△
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
3/16W24	P2	SUMQW03M	2.5P	60	13	21	33	5.5	4.5	7	3	3	△
1/4W20	P2	SUMQW04N	2.5P	62	15	26	33	6	4.5	7	3	3	△
5/16W18	P2	SUMQW05O	2.5P	70	19	-	36	6.2	5	8	3	4	△
3/8W16	P2	SUMQW06P	2.5P	75	23	-	38	7	5.5	8	3	4	△
7/16W14	P3	SUMRW07Q	2.5P	82	26	-	42	8.5	6.5	9	3	4	△
1/2W12	P3	SUMRW08S	2.5P	88	26	-	45	10.5	8	11	3	4	△
9/16W12	P3	SUMRW09S	2.5P	95	26	-	48	12.5	10	13	3	4	△
5/8W11	P3	SUMRW10U	2.5P	95	26	-	48	12.5	10	13	3	4	△
3/4W10	P3	SUMRW12V	2.5P	105	33	-	50	15	12	15	4	5	△
7/8W9	P3	SUMRW14W	2.5P	115	33	-	55	17	13	16	4	5	△
1 W8	P3	SUMRW16X	2.5P	125	39	-	58	19	15	18	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

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

SUXSP

X Series Spiral Fluted Taps for Stainless Steels

Specification

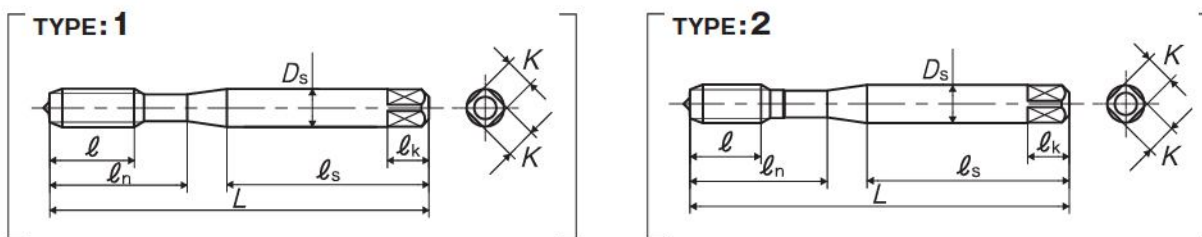


■Applying the blanks of high toughness and high accuracy, SUXSP derives the maximum performance from high facility machining centers and high precision toolings. Spiral fluted taps for stainless steels.

Recommended Tapping Speeds depending on Materials

Alloy steels 合金鋼	Stainless steels ステンレス鋼
5~15 (m/min)	5~10 (m/min)

For icon explanation, refer to P.24



Segment : 1C

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	Stock
For Metric Threads													
M6 × 1	P2	SUXQ6.0M	2.5P	80	15	30	45	6	4.9	8	3	1	○
M8 × 1.25	P3	SUXR8.0N	2.5P	90	19	35	48	8	6.2	9	3	1	○
M8 × 1	P3	SUXR8.0M	2.5P	90	15	35	48	8	6.2	9	3	2	○
M10 × 1.5	P3	SUXR0100	2.5P	100	23	39	53	10	8	11	4	1	○
M10 × 1.25	P3	SUXR010N	2.5P	100	19	39	53	10	8	11	4	2	○
M10 × 1	P3	SUXR010M	2.5P	100	15	39	53	10	8	11	4	2	○
M12 × 1.75	P4	SUXS012P	2.5P	110	26	45	56	12	9	12	4	1	○
M12 × 1.5	P3	SUXR0120	2.5P	110	23	45	56	12	9	12	4	2	○
M12 × 1.25	P3	SUXR012N	2.5P	110	19	45	56	12	9	12	4	2	○

Note:

- Please use tapping holders suitable for the shank diameter and square of DIN371 for M6~M10 and those of M16 (DIN376) for M12.
- Overall length, shank diameter and square of metric coarse series are adopted for those of metric fine series.

SU2-SP

Spiral Fluted Taps for Tough Stainless Steels

Specification

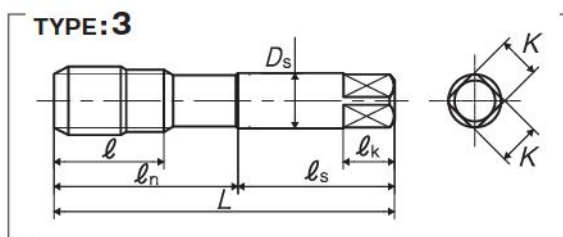
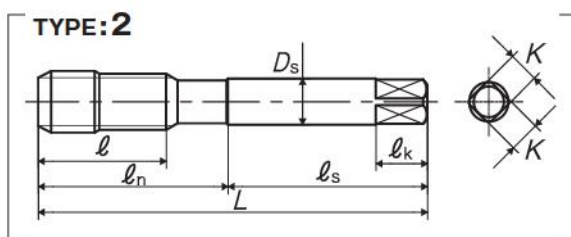
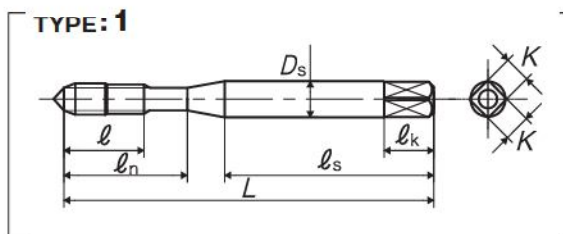


■SU2-SP is the spiral fluted tap most suitable for such tough stainless steels as SUS316 and SUS317, blind hole use

Recommended Tapping Speeds depending on Materials

Alloy steels 合金鋼	Stainless steels ステンレス鋼
5~20 (m/min)	5~15 (m/min)

For icon explanation, refer to P.24



Segment : 1C

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	SU2MQ3.0G	3P	46	9	14	26	4	3.2	6	3	1	○
M3.5 × 0.6	P2	SU2MQ3.5H	3P	52	11	16	29	5	4	7	3	1	△
M4 × 0.7	P2	SU2MQ4.0I	3P	52	11	17	29	5	4	7	3	1	○
M5 × 0.8	P2	SU2MQ5.0K	3P	60	13	22	33	5.5	4.5	7	3	1	○
M6 × 1	P2	SU2MQ6.0M	3P	62	15	26	33	6	4.5	7	3	1	○
M8 × 1.25	P3	SU2MR8.0N	3P	70	19	-	36	6.2	5	8	3	2	○
M10 × 1.5	P3	SU2MR0100	3P	75	23	-	38	7	5.5	8	3	2	○
M10 × 1.25	P3	SU2MR010N	3P	75	23	-	38	7	5.5	8	3	2	○
M10 × 1	P3	SU2MR010M	3P	75	23	-	38	7	5.5	8	3	2	△
M12 × 1.75	P3	SU2MR012P	3P	82	26	-	42	8.5	6.5	9	4	2	○
M12 × 1.5	P3	SU2MR0120	3P	82	26	-	42	8.5	6.5	9	4	2	△
M12 × 1.25	P3	SU2MR012N	3P	82	26	-	42	8.5	6.5	9	4	2	△
M12 × 1	P3	SU2MR012M	3P	82	26	-	42	8.5	6.5	9	4	2	△
M14 × 2	P3	SU2MR014Q	3P	88	26	-	45	10.5	8	11	4	2	△
M14 × 1.5	P3	SU2MR0140	3P	88	26	-	45	10.5	8	11	4	2	△
M16 × 2	P3	SU2MR016Q	3P	95	26	-	48	12.5	10	13	4	2	○
M16 × 1.5	P3	SU2MR0160	3P	95	26	-	48	12.5	10	13	4	2	△
M18 × 2.5	P4	SU2MS018R	3P	100	33	-	51	14	11	14	4	2	△
M18 × 1.5	P3	SU2MR0180	3P	100	33	-	51	14	11	14	4	2	△
M20 × 2.5	P4	SU2MS020R	3P	105	33	-	50	15	12	15	4	3	○
M20 × 1.5	P4	SU2MS0200	3P	105	33	-	50	15	12	15	4	3	△
M22 × 2.5	P4	SU2MS022R	3P	115	33	-	55	17	13	16	4	3	△
M22 × 1.5	P4	SU2MS0220	3P	115	33	-	55	17	13	16	4	3	△

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

SU2-SP Spiral Fluted Taps for Tough 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
M24 × 3	P4	SU2MS024S	3P	120	39	-	55	19	15	18	4	3	△
M24 × 1.5	P4	SU2MS0240	3P	120	39	-	55	19	15	18	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

SU-S-SP

Spiral Fluted Taps for Stainless Steels, Deep Hole Use

Specification

HSS
OX

Oxide



■SU-S-SP is the short spiral fluted tap for stainless steels suitable for stainless steels tending to work-harden and sticky, as well as chrome steels and molybdenum steels. Blind hole use. Deeper hole tapping is attainable.

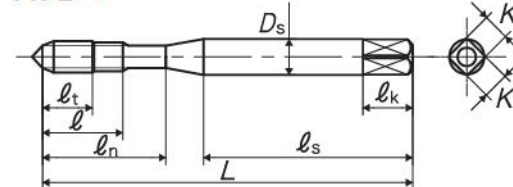
Recommended Tapping Speeds depending on Materials

High carbon steels
高炭素鋼
5~10
(m/min)

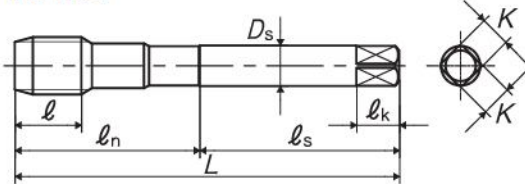
Stainless steels
ステンレス鋼
5~10
(m/min)

For icon explanation, refer to P.24

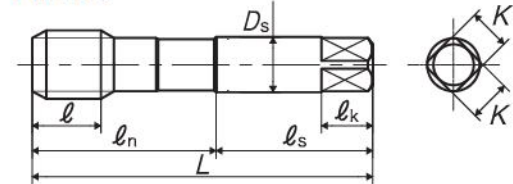
TYPE:1



TYPE:2



TYPE:3



Segment : 1C

Size	Class	Code	Chamfer	L (mm)	l _t (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	P1	SSMP3.0G-SU	2.5P	46	5	9	14	26	4	3.2	6	3	1	△
M4 × 0.7	P2	SSMQ4.0I-SU	2.5P	52	7	11	17	29	5	4	7	3	1	△
M5 × 0.8	P2	SSMQ5.0K-SU	2.5P	60	9	13	22	33	5.5	4.5	7	3	1	△
M6 × 1	P2	SSMQ6.0M-SU	2.5P	62	11	15	26	33	6	4.5	7	3	1	△
M8 × 1.25	P2	SSMQ8.0N-SU	2.5P	70	-	12	-	36	6.2	5	8	3	2	△
M10 × 1.5	P2	SSMQ10.0O-SU	2.5P	75	-	13	-	38	7	5.5	8	3	2	△
M12 × 1.75	P2	SSMQ12.0P-SU	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	△
M14 × 2	P2	SSMQ14.0Q-SU	2.5P	88	-	18	-	45	10.5	8	11	3	2	△
M16 × 2	P2	SSMQ16.0Q-SU	2.5P	95	-	18	-	48	12.5	10	13	3	2	△
M18 × 2.5	P3	SSMR18R-SU	2.5P	100	-	20	-	51	14	11	14	4	2	△
M20 × 2.5	P3	SSMR20R-SU	2.5P	105	-	20	-	50	15	12	15	4	3	△

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

LS-SU-S-SP

Long Shank Spiral Fluted Taps for Stainless Steels, Deep Hole Use

Specification

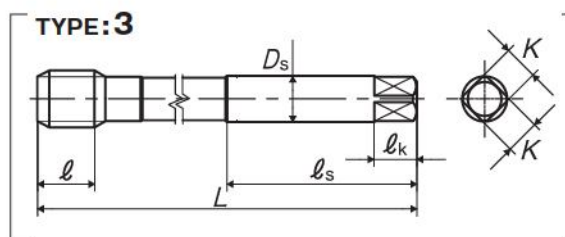
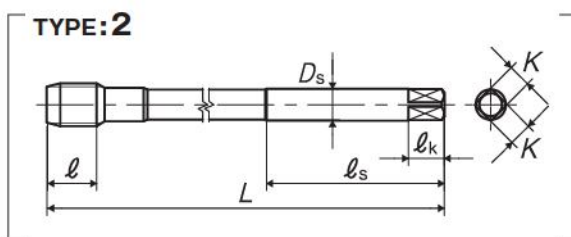
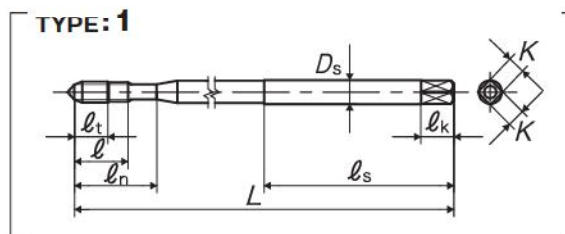


Recommended Tapping Speeds depending on Materials

High carbon steels 高炭素鋼	Stainless steels ステンレス鋼
5~10 (m/min)	5~10 (m/min)

For icon explanation, refer to P.24

■LS-SU-S-SP is the long shank short spiral fluted tap for stainless steels suitable for stainless steels tending to work-harden and sticky, as well as chrome steels and molybdenum steels. Blind hole use. Deeper hole tapping is attainable.



Segment : 1C

Size	Class	Code	Chamfer	L (mm)	ℓ_t (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	Type	Stock
For Metric Threads														
M3 × 0.5	P1	-	2.5P	100	5	9	14	40	4	3.2	6	3	1	△
M4 × 0.7	P2	-	2.5P	100 150	7	11	17	40	5	4	7	3	1	△
M5 × 0.8	P2	-	2.5P	100 150	9	13	22	40	5.5	4.5	7	3	1	△
M6 × 1	P2	-	2.5P	100 150	11	15	26	40	6	4.5	7	3	1	△
M8 × 1.25	P2	-	2.5P	100 150	-	12	-	50	6.2	5	8	3	2	△
M10 × 1.5	P2	-	2.5P	100 150	-	13	-	50	7	5.5	8	3	2	△
M12 × 1.75	P2	-	2.5P	150	-	15	-	50	8.5	6.5	9	3	2	△
M14 × 2	P2	-	2.5P	150	-	18	-	60	10.5	8	11	3	2	△
M16 × 2	P2	-	2.5P	150	-	18	-	60	12.5	10	13	3	2	△
M20 × 2.5	P3	-	2.5P	150	-	20	-	70	15	12	15	4	3	△
M24 × 3	P3	-	2.5P	150	-	25	-	80	19	15	18	4	3	△

S-SP

Short Spiral Fluted Taps, Deep Hole Use
Specification

HSS

OX
Oxide



■ Due to short thread portion, friction becomes less and lubrication supply becomes better, and S-SP is the spiral fluted tap quite efficient for tapping deep holes that are 2.5 times deeper than the normal dia,

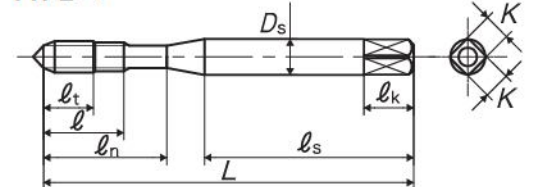
Recommended Tapping Speeds depending on Materials

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

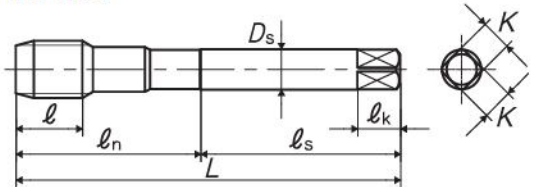
Alloy steels
合金鋼
5~10
(m/min)

For icon explanation, refer to P.24

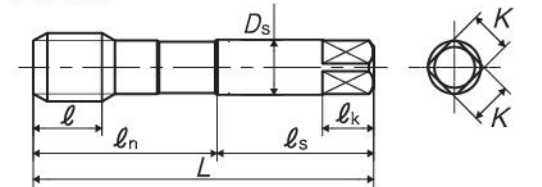
TYPE:1



TYPE:2



TYPE:3



Oversize
Segment : 1C

Size	Class	Code	Chamfer	L (mm)	l _t (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														
M2 × 0.4	P1	SSMP2.0E	2.5P	42	4	7.2	12	27	3	2.5	5	2	1	○
M2.3 × 0.4	P1	SSMP2.3E	2.5P	42	4	7.2	12	27	3	2.5	5	2	1	△
M2.5 × 0.45	P1	SSMP2.5F	2.5P	46	4	8.1	14	29	3	2.5	5	2	1	△
M2.6 × 0.45	P1	SSMP2.6F	2.5P	46	4	8.1	14	29	3	2.5	5	2	1	△
M3 × 0.5	P1	SSMP3.0G-3	2.5P	46	5	9	14	26	4	3.2	6	3	1	◎
	P3	SSMR3.0G												△
M3.5 × 0.6	P1	SSMP3.5H-3	2.5P	52	7	11	16	29	5	4	7	3	1	△
M4 × 0.7	P2	SSMQ4.0I	2.5P	52	7	11	17	29	5	4	7	3	1	◎
	P3	SSMR4.0I												△
M5 × 0.8	P2	SSMQ5.0K	2.5P	60	9	13	22	33	5.5	4.5	7	3	1	◎
	P3	SSMR5.0K												△
M6 × 1	P2	SSMQ6.0M	2.5P	62	11	15	26	33	6	4.5	7	3	1	◎
	P3	SSMR6.0M												△
M8 × 1.25	P2	SSMQ8.0N	2.5P	70	-	12	-	36	6.2	5	8	3	2	◎
	P3	SSMR8.0N												△
M8 × 1	P2	SSMQ8.0M	2.5P	70	-	12	-	36	6.2	5	8	3	2	△
M10 × 1.5	P2	SSMQ10.0	2.5P	75	-	13	-	38	7	5.5	8	3	2	◎
	P3	SSMR10.0												△
M10 × 1.25	P2	SSMQ10.0N	2.5P	75	-	13	-	38	7	5.5	8	3	2	○
M10 × 1	P2	SSMQ10.0M	2.5P	75	-	13	-	38	7	5.5	8	3	2	△
M12 × 1.75	P2	SSMQ12.0P	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	◎
	P3	SSMR12.0P												△
M12 × 1.5	P2	SSMQ12.0	2.5P	82	-	15	-	42	8.5	6.5	9	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-SP Short Spiral Fluted Taps, 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
M12 × 1.25	P2	SSMQ012N	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	○
M12 × 1	P2	SSMQ012M	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	△
M14 × 2	P2	SSMQ014Q	2.5P	88	-	18	-	45	10.5	8	11	3	2	○
M14 × 1.5	P2	SSMQ014Q	2.5P	88	-	14	-	45	10.5	8	11	3	2	○
M14 × 1	P2	SSMQ014M	2.5P	88	-	14	-	45	10.5	8	11	3	2	△
M16 × 2	P2	SSMQ016Q	2.5P	95	-	18	-	48	12.5	10	13	3	2	◎
M16 × 1.5	P2	SSMQ016Q	2.5P	95	-	14	-	48	12.5	10	13	3	2	○
M16 × 1	P2	SSMQ016M	2.5P	95	-	14	-	48	12.5	10	13	3	2	△
M18 × 2.5	P3	SSMR018R	2.5P	100	-	20	-	51	14	11	14	4	2	○
M18 × 2	P3	SSMR018Q	2.5P	100	-	18	-	51	14	11	14	4	2	△
M18 × 1.5	P2	SSMQ018Q	2.5P	100	-	14	-	51	14	11	14	4	2	△
M18 × 1	P2	SSMQ018M	2.5P	100	-	14	-	51	14	11	14	4	2	△
M20 × 2.5	P3	SSMR020R	2.5P	105	-	20	-	50	15	12	15	4	3	◎
M20 × 2	P3	SSMR020Q	2.5P	105	-	18	-	50	15	12	15	4	3	△
M20 × 1.5	P3	SSMR020Q	2.5P	105	-	14	-	50	15	12	15	4	3	△
M20 × 1	P2	SSMQ020M	2.5P	105	-	14	-	50	15	12	15	4	3	△
M22 × 2.5	P3	SSMR022R	2.5P	115	-	20	-	55	17	13	16	4	3	○
M22 × 2	P3	SSMR022Q	2.5P	115	-	18	-	55	17	13	16	4	3	△
M22 × 1.5	P3	SSMR022Q	2.5P	115	-	14	-	55	17	13	16	4	3	△
M24 × 3	P3	SSMR024S	2.5P	120	-	25	-	55	19	15	18	4	3	○
M24 × 2	P3	SSMR024Q	2.5P	120	-	18	-	55	19	15	18	4	3	△
M24 × 1.5	P3	SSMR024Q	2.5P	120	-	18	-	55	19	15	18	4	3	△
M27 × 3	P3	SSMR027S	2.5P	130	-	25	-	60	20	15	18	4	3	△
M27 × 2	P3	SSMR027Q	2.5P	130	-	20	-	60	20	15	18	4	3	△
M27 × 1.5	P3	SSMR027Q	2.5P	130	-	20	-	60	20	15	18	4	3	△
M30 × 3.5	P4	SSMS030T	2.5P	135	-	30	-	62	23	17	20	4	3	△
M30 × 3	P3	SSMR030S	2.5P	135	-	28	-	62	23	17	20	4	3	△
M30 × 2	P3	SSMR030Q	2.5P	135	-	20	-	62	23	17	20	4	3	△
M30 × 1.5	P3	SSMR030Q	2.5P	135	-	20	-	62	23	17	20	4	3	△
M33 × 3.5	P4	SSMS033T	2.5P	145	-	30	-	67	25	19	22	4	3	△
M33 × 3	P3	SSMR033S	2.5P	145	-	28	-	67	25	19	22	4	3	△
M33 × 2	P3	SSMR033Q	2.5P	145	-	20	-	67	25	19	22	4	3	△
M33 × 1.5	P3	SSMR033Q	2.5P	145	-	20	-	67	25	19	22	4	3	△
M36 × 4	P4	SSMS036U	2.5P	155	-	40	-	71	28	21	24	4	3	△
M36 × 3	P3	SSMR036S	2.5P	155	-	30	-	71	28	21	24	4	3	△
M36 × 1.5	P3	SSMR036Q	2.5P	155	-	20	-	71	28	21	24	4	3	△
M39 × 4	P4	SSMS039U	2.5P	165	-	40	-	76	30	23	26	4	3	△
M42 × 4.5	P4	SSMS042V	2.5P	175	-	40	-	81	32	26	30	4	3	△
M45 × 4.5	P4	SSMS045V	2.5P	180	-	45	-	83	35	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

E-SP

Spiral Fluted Taps for Soft Structural Steels

Specification

HSS
OX
Oxide

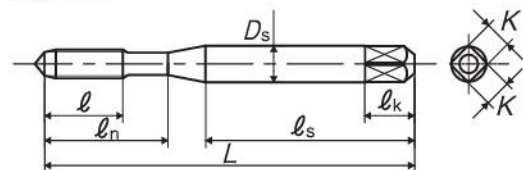

■ Suitable particularly for soft steels such as SS41, S25C and the like.

Recommended Tapping Speeds depending on Materials

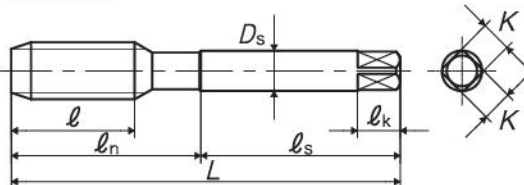
Low carbon steels
低炭鋼類
5~10
(m/min)

For icon explanation, refer to P.24

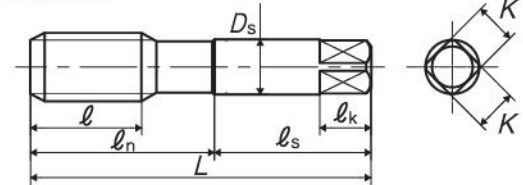
TYPE:1



TYPE:2



TYPE:3



Segment : 1C

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	P1	ESHMP3.0G	2.5P	46	9	14	26	4	3.2	6	2	1	△
		ESHMP3.0G-3									3		○
M3.5 × 0.6	P1	ESHMP3.5H	2.5P	52	11	16	29	5	4	7	3	1	△
M4 × 0.7	P2	ESHMQ4.0I	2.5P	52	11	17	29	5	4	7	3	1	○
M5 × 0.8	P2	ESHMQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	1	○
M6 × 1	P2	ESHMQ6.0M	2.5P	62	15	26	33	6	4.5	7	3	1	○
M8 × 1.25	P2	ESHMQ8.0N	2.5P	70	19	-	36	6.2	5	8	3	2	○
M10 × 1.5	P2	ESHMQ10.0	2.5P	75	23	-	38	7	5.5	8	3	2	○
M10 × 1.25	P2	ESHMQ10.0N	2.5P	75	23	-	38	7	5.5	8	3	2	△
M12 × 1.75	P2	ESHMQ12.0P	2.5P	82	26	-	42	8.5	6.5	9	3	2	○
M12 × 1.5	P2	ESHMQ12.0	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
M12 × 1.25	P2	ESHMQ12.0N	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
M14 × 2	P2	ESHMQ14.0Q	2.5P	88	26	-	45	10.5	8	11	3	2	△
M14 × 1.5	P2	ESHMQ14.0	2.5P	88	26	-	45	10.5	8	11	3	2	△
M16 × 2	P2	ESHMQ16.0Q	2.5P	95	26	-	48	12.5	10	13	3	2	○
M16 × 1.5	P2	ESHMQ16.0	2.5P	95	26	-	48	12.5	10	13	3	2	△
M18 × 2.5	P3	ESHMR18.0R	2.5P	100	33	-	51	14	11	14	4	2	△
M18 × 1.5	P2	ESHMQ18.0	2.5P	100	33	-	51	14	11	14	4	2	△
M20 × 2.5	P3	ESHMR20.0R	2.5P	105	33	-	50	15	12	15	4	3	○
M20 × 1.5	P3	ESHMR20.0	2.5P	105	33	-	50	15	12	15	4	3	△
M22 × 2.5	P3	ESHMR22.0R	2.5P	115	33	-	55	17	13	16	4	3	△
M22 × 1.5	P3	ESHMR22.0	2.5P	115	33	-	55	17	13	16	4	3	△
M24 × 3	P3	ESHMR24.0S	2.5P	120	39	-	55	19	15	18	4	3	△

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

E-SP Spiral Fluted Taps for Soft Structural Steels

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	P3	ESHMR0240	2.5P	120	39	-	55	19	15	18	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+SP/HC-SP

Spiral Fluted Taps for High Carbon Steels

Specification



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

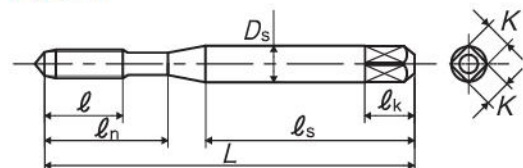
HC+SP	~ M6
HC-SP	M8~, all W

Recommended Tapping Speeds depending on Materials

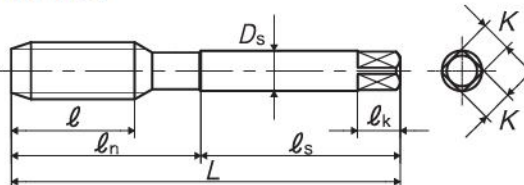
Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼
5~10 (m/min)	5~10 (m/min)

For icon explanation, refer to P.24

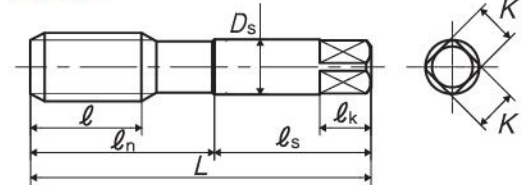
TYPE:1



TYPE:2



TYPE:3



Segment : 1C

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	P1	SCPP3.0G	2.5P	46	9	14	26	4	3.2	6	3	1	○
M4 × 0.7	P2	SCPQ4.0I	2.5P	52	11	17	29	5	4	7	3	1	○
M5 × 0.8	P2	SCPQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	1	○
M6 × 1	P2	SCPQ6.0M	2.5P	62	15	26	33	6	4.5	7	3	1	○
M8 × 1.25	P2	SCMQ8.0N	2.5P	70	19	-	36	6.2	5	8	3	2	○
M8 × 1	P2	SCMQ8.0M	2.5P	70	19	-	36	6.2	5	8	3	2	△
M10 × 1.5	P2	SCMQ10.0O	2.5P	75	23	-	38	7	5.5	8	3	2	○
M10 × 1.25	P2	SCMQ10.0N	2.5P	75	23	-	38	7	5.5	8	3	2	△
M10 × 1	P2	SCMQ10.0M	2.5P	75	23	-	38	7	5.5	8	3	2	△
M12 × 1.75	P2	SCMQ12.0P	2.5P	82	26	-	42	8.5	6.5	9	3	2	○
M12 × 1.5	P2	SCMQ12.0O	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
M12 × 1.25	P2	SCMQ12.0N	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
M12 × 1	P2	SCMQ12.0M	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
M14 × 2	P2	SCMQ14.0Q	2.5P	88	26	-	45	10.5	8	11	3	2	△
M14 × 1.5	P2	SCMQ14.0O	2.5P	88	26	-	45	10.5	8	11	3	2	△
M14 × 1.25	P2	SCMQ14.0N	2.5P	88	26	-	45	10.5	8	11	3	2	△
M14 × 1	P2	SCMQ14.0M	2.5P	88	26	-	45	10.5	8	11	3	2	△
M16 × 2	P2	SCMQ16.0Q	2.5P	95	26	-	48	12.5	10	13	3	2	○
M16 × 1.5	P2	SCMQ16.0O	2.5P	95	26	-	48	12.5	10	13	3	2	△
M16 × 1	P2	SCMQ16.0M	2.5P	95	26	-	48	12.5	10	13	3	2	△
M18 × 2.5	P3	SCMR18.0R	2.5P	100	33	-	51	14	11	14	4	2	△
M18 × 2	P3	SCMR18.0Q	2.5P	100	33	-	51	14	11	14	4	2	△
M18 × 1.5	P2	SCMQ18.0O	2.5P	100	33	-	51	14	11	14	4	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

HC+SP/HC-SP Spiral Fluted 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
M18 × 1	P2	SCMQ018M	2.5P	100	18	-	51	14	11	14	4	2	△
M20 × 2.5	P3	SCMR020R	2.5P	105	33	-	50	15	12	15	4	3	○
M20 × 2	P3	SCMR020Q	2.5P	105	33	-	50	15	12	15	4	3	△
M20 × 1.5	P3	SCMR020O	2.5P	105	33	-	50	15	12	15	4	3	△
M20 × 1	P2	SCMQ020M	2.5P	105	18	-	50	15	12	15	4	3	△
M22 × 2.5	P3	SCMR022R	2.5P	115	33	-	55	17	13	16	4	3	△
M22 × 2	P3	SCMR022Q	2.5P	115	33	-	55	17	13	16	4	3	△
M22 × 1.5	P3	SCMR022O	2.5P	115	33	-	55	17	13	16	4	3	△
M24 × 3	P3	SCMR024S	2.5P	120	39	-	55	19	15	18	4	3	△
M24 × 2	P3	SCMR024Q	2.5P	120	39	-	55	19	15	18	4	3	△
M24 × 1.5	P3	SCMR024O	2.5P	120	39	-	55	19	15	18	4	3	△
M25 × 1.5	P3	SCMR025O	2.5P	125	39	-	58	19	15	18	4	3	△
M26 × 1.5	P3	SCMR026O	2.5P	130	39	-	60	20	15	18	4	3	△
M27 × 3	P3	SCMR027S	2.5P	130	39	-	60	20	15	18	4	3	△
M27 × 1.5	P3	SCMR027O	2.5P	130	39	-	60	20	15	18	4	3	△
M28 × 1.5	P3	SCMR028O	2.5P	135	46	-	62	23	17	20	4	3	△
M30 × 3.5	P4	SCMS030T	2.5P	135	46	-	62	23	17	20	4	3	△
M30 × 1.5	P3	SCMR030O	2.5P	135	46	-	62	23	17	20	4	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	P2	SCMQW04N	2.5P	62	15	26	33	6	4.5	7	3	1	△
5/16W18	P2	SCMQW05O	2.5P	70	19	-	36	6.2	5	8	3	2	△
3/8W16	P2	SCMQW06P	2.5P	75	23	-	38	7	5.5	8	3	2	△
1/2W12	P3	SCMRW08S	2.5P	88	26	-	45	10.5	8	11	3	2	△
5/8W11	P3	SCMRW10U	2.5P	95	26	-	48	12.5	10	13	3	2	△
3/4W10	P3	SCMRW12V	2.5P	105	33	-	50	15	12	15	4	3	△
7/8W9	P3	SCMRW14W	2.5P	115	33	-	55	17	13	16	4	3	△
1 W8	P3	SCMRW16X	2.5P	125	39	-	58	19	15	18	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

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

HC+SP OX / HC-SP OX



Spiral Fluted Taps for High Carbon Steels, Oxided

Specification



■Spiral fluted tap suitable for high carbon steels such as S55C and the like, oxidized to avoid welding trouble.

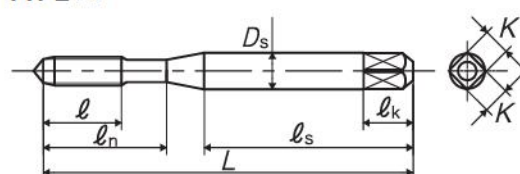
Recommended Tapping Speeds depending on Materials

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

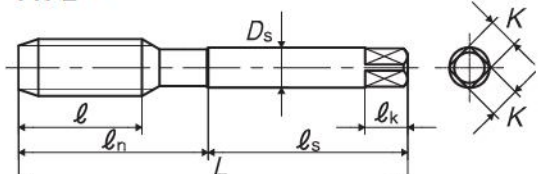
For icon explanation, refer to P.24

HC+SP OX	~ M6
HC-SP OX	M8~

TYPE:1



TYPE:2



Segment : 1C

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	Stock
For Metric Threads													
M3 × 0.5	P1	SCPP3.0GX	2.5P	46	9	14	26	4	3.2	6	3	1	◎
M4 × 0.7	P2	SCPQ4.0IX	2.5P	52	11	17	29	5	4	7	3	1	◎
M5 × 0.8	P2	SCPQ5.0KX	2.5P	60	13	22	33	5.5	4.5	7	3	1	◎
M6 × 1	P2	SCPQ6.0MX	2.5P	62	15	26	33	6	4.5	7	3	1	◎
M8 × 1.25	P2	SCMQ8.0NX	2.5P	70	19	-	36	6.2	5	8	3	2	◎
M10 × 1.5	P2	SCMQ0100X	2.5P	75	23	-	38	7	5.5	8	3	2	◎
M12 × 1.75	P2	SCMQ012PX	2.5P	82	26	-	42	8.5	6.5	9	3	2	◎
M16 × 2	P2	SCMQ016QX	2.5P	95	26	-	48	12.5	10	13	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

Centering Tools

AL+SP/AL-SP

Spiral Fluted Taps for Aluminum

Specification



AL+SP	~ M6
AL-SP	M8~, all STI

Recommended Tapping Speeds depending on Materials

Brass 黄銅 10~25 (m/min)	Brass castings 黄銅鑄物 10~25 (m/min)	Bronze 青銅 10~25 (m/min)	Wrought aluminum アルミ圧延材 10~25 (m/min)	Aluminum alloy castings アルミ合金鑄物 10~25 (m/min)	Magnesium alloy die castings マグネシウム合金鋳物 10~25 (m/min)	Zinc alloy castings 亜鉛合金鑄物 10~25 (m/min)
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For icon explanation, refer to P.24

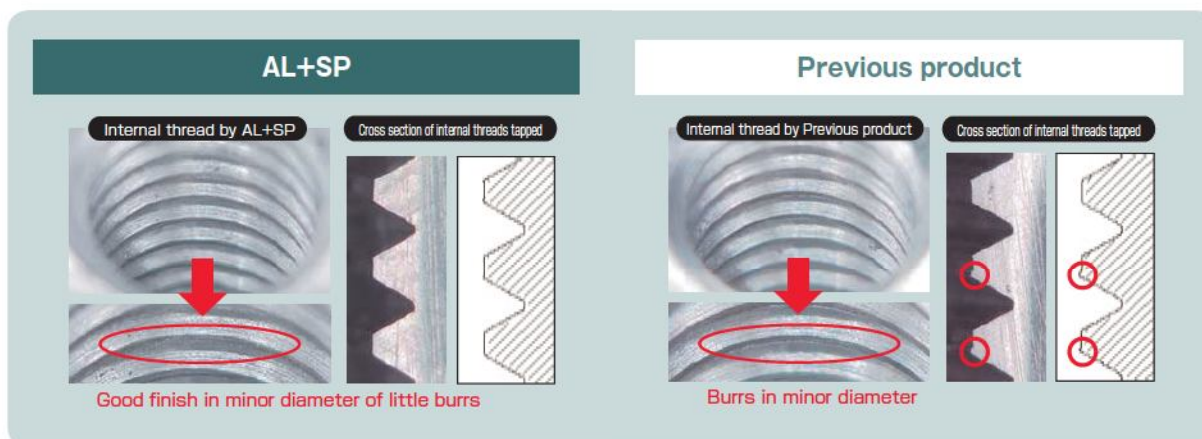
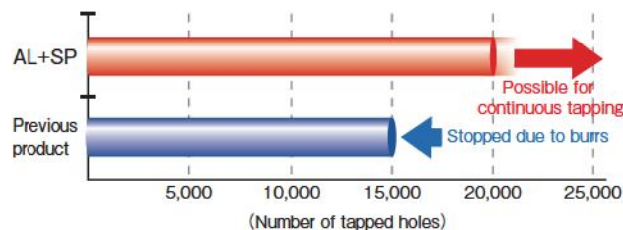
Product features

- AL+SP ensures the consistent tapping even in high speed cutting area, in forged workpieces of light alloys such as aluminum die castings and aluminum castings.
- Having optimum cutting edge design, AL+SP does not produce burrs in minor diameter which usually tend to come out during tapping light alloys, and results in cutting of stable and clean internal threads.

Tapping data

Tapping condition (M6×1)

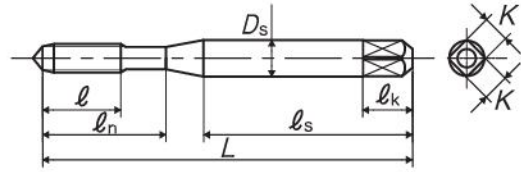
Work material	AC4C
Tapping speed	20m/min
Hole size	φ5.0
Tapping length	9mm, blind hole
Machine	Machining center, vertical type
Tapping fluid	Water soluble oil (chlorine free, 20 fold dilution rate)



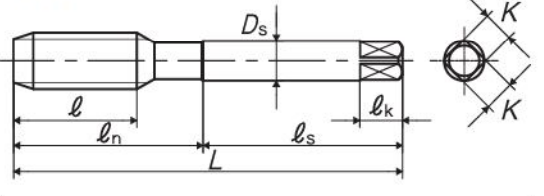
- Compared with previous product, AL+SP assures internal threads of better quality and longer tool life.

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

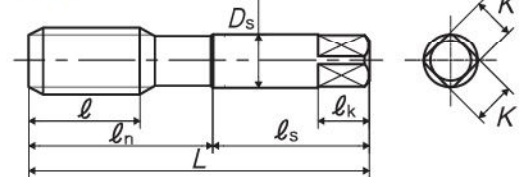
TYPE:1



TYPE:2



TYPE:3



Segment : 1A

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	ASHPQ2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	1	○
M2.3 × 0.4	P2	ASHPQ2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	1	△
M2.5 × 0.45	P2	ASHPQ2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	1	○
M2.6 × 0.45	P2	ASHPQ2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	1	○
M3 × 0.5	P2	ASHPQ3.0G	2.5P	46	9	14	26	4	3.2	6	3	1	○
M3.5 × 0.6	P2	ASHPQ3.5H	2.5P	52	11	16	29	5	4	7	3	1	△
M4 × 0.7	P3	ASHPR4.0I	2.5P	52	11	17	29	5	4	7	3	1	○
M5 × 0.8	P3	ASHPR5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	1	○
M6 × 1	P3	ASHPR6.0M	2.5P	62	15	26	33	6	4.5	7	3	1	○
M8 × 1.25	P3	ASHMR8.0N	2.5P	70	19	-	36	6.2	5	8	3	2	○
M10 × 1.5	P3	ASHMR0100	2.5P	75	23	-	38	7	5.5	8	3	2	○
M10 × 1.25	P3	ASHMR010N	2.5P	75	23	-	38	7	5.5	8	3	2	△
M10 × 1	P3	ASHMR010M	2.5P	75	23	-	38	7	5.5	8	3	2	△
M12 × 1.75	P3	ASHMR012P	2.5P	82	26	-	42	8.5	6.5	9	3	2	○
M12 × 1.5	P3	ASHMR0120	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
M12 × 1.25	P3	ASHMR012N	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
M12 × 1	P3	ASHMR012M	2.5P	82	26	-	42	8.5	6.5	9	3	2	△
M14 × 2	P3	ASHMR014Q	2.5P	88	26	-	45	10.5	8	11	3	2	△
M14 × 1.5	P3	ASHMR0140	2.5P	88	26	-	45	10.5	8	11	3	2	△
M16 × 2	P3	ASHMR016Q	2.5P	95	26	-	48	12.5	10	13	3	2	△
M16 × 1.5	P3	ASHMR0160	2.5P	95	26	-	48	12.5	10	13	3	2	△

Size	Class	Code	Chamfer	Basic major dia (mm)	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	SW3.0G1LEN	2.5P	3.65	52	7.5	17	29	5	4	7	3	1	○
STI M4 × 0.7	1b	SW4.0I1LEN	2.5P	4.909	60	13	22	33	5.5	4.5	7	3	1	○
STI M5 × 0.8	1b	SW5.0K1LEN	2.5P	6.039	62	15	26	33	6	4.5	7	3	1	○
STI M6 × 1	1b	SW6.0M1LEN	2.5P	7.299	70	19	-	36	6.2	5	8	3	2	○
STI M8 × 1.25	1b	SW8.0N1LEN	2.5P	9.624	75	23	-	38	7	5.5	8	3	2	○
STI M10 × 1.5	1b	SW01001LEN	2.5P	11.948	82	26	-	42	8.5	6.5	9	3	2	○
STI M10 × 1.25	1b	SW010N1LEN	2.5P	11.624	82	26	-	42	8.5	6.5	9	3	2	△
STI M12 × 1.75	1b	SW012P1LEN	2.5P	14.273	95	26	-	48	12.5	10	13	3	2	○
STI M12 × 1.5	1b	SW01201LEN	2.5P	13.948	88	26	-	45	10.5	8	11	3	2	△

○=Standard ○=Semi standard △=Made to order
For improvement, spec may change without advance notice.

Think threads with
YAMAWA

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

SP-52

77

AL+SP/AL-SP Spiral Fluted Taps for Aluminum

Size	Class	Code	Chamfer	Basic major dia (mm)	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
STI M12 × 1.25	1b	SW012N1LEN	2.5P	13.624	88	26	-	45	10.5	8	11	3	2	△
STI M14 × 2	1b	SW014Q1LEN	2.5P	16.598	100	33	-	51	14	11	14	3	2	△
STI M14 × 1.5	1b	SW014O1LEN	2.5P	15.948	95	26	-	48	12.5	10	13	3	2	△
STI M16 × 2	1b	SW016Q1LEN	2.5P	18.598	105	33	-	50	15	12	15	4	3	○
STI M16 × 1.5	1b	SW016O1LEN	2.5P	17.948	100	33	-	51	14	11	14	4	3	△
STI M18 × 2.5	1b	SW018R1LEN	2.5P	21.248	115	33	-	55	17	13	16	4	3	△
STI M18 × 1.5	1b	SW018O1LEN	2.5P	19.948	105	33	-	50	15	12	15	4	3	△
STI M20 × 2.5	1b	SW020R1LEN	2.5P	23.248	120	39	-	55	19	15	18	4	3	○
STI M20 × 1.5	1b	SW020O1LEN	2.5P	21.948	115	33	-	55	17	13	16	4	3	△
STI M22 × 2.5	1b	SW022R1LEN	2.5P	25.248	125	39	-	58	19	15	18	4	3	△
STI M24 × 3	1b	SW024S1LEN	2.5P	27.897	135	46	-	62	23	17	20	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

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

AL-SP 1.5P

Spiral Fluted Taps for Aluminum 1.5P

Specification

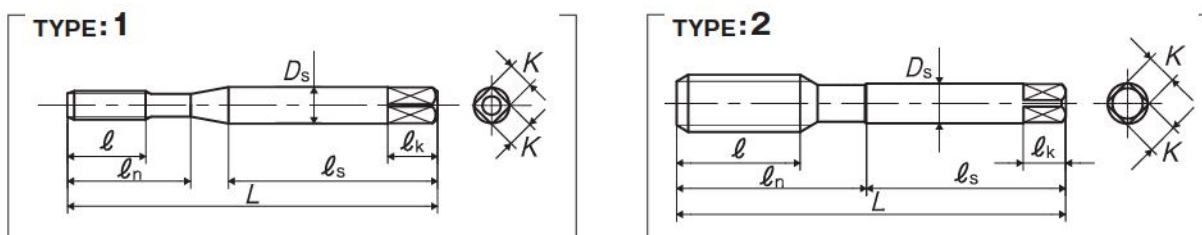


■ In aluminum die casting and aluminum casting tapping, AL-SP solves such problems as chip jamming, chip clogging, and torn threads.

Recommended Tapping Speeds depending on Materials

Brass 黄銅 10~25 (m/min)	Brass castings 黄銅鑄物 10~25 (m/min)	Bronze 青銅 10~25 (m/min)	Wrought aluminum アルミ圧延材 10~25 (m/min)	Aluminum alloy castings アルミ合金鑄物 10~25 (m/min)	Magnesium alloy die castings マグネシウム合金鋳物 10~25 (m/min)	Zinc alloy castings 亜鉛合金鑄物 10~25 (m/min)
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For icon explanation, refer to P.24



Segment : 1C

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	SY2.0EQLNA	1.5P	42	7.2	12	27	3	2.5	5	2	1	○
M2.3 × 0.4	P2	SY2.3EQLNA	1.5P	42	7.2	12	27	3	2.5	5	2	1	△
M2.5 × 0.45	P2	SY2.5FQLNA	1.5P	46	8.1	14	29	3	2.5	5	2	1	○
M2.6 × 0.45	P2	SY2.6FQLNA	1.5P	46	8.1	14	29	3	2.5	5	2	1	○
M3 × 0.5	P2	SY3.0GQLNA	1.5P	46	9	14	26	4	3.2	6	3	1	○
M3.5 × 0.6	P2	SY3.5HQLNA	1.5P	52	11	16	29	5	4	7	3	1	△
M4 × 0.7	P3	SY4.0IRLNA	1.5P	52	11	17	29	5	4	7	3	1	○
M5 × 0.8	P3	SY5.0KRLENA	1.5P	60	13	22	33	5.5	4.5	7	3	1	○
M6 × 1	P3	SY6.0MRLENA	1.5P	62	15	26	33	6	4.5	7	3	1	○
M8 × 1.25	P3	SY8.0NRLENA	1.5P	70	19	-	36	6.2	5	8	3	2	○
M10 × 1.5	P3	SY10.0ORLENA	1.5P	75	23	-	38	7	5.5	8	3	2	○
M10 × 1.25	P3	SY10.1NRLENA	1.5P	75	23	-	38	7	5.5	8	3	2	△
M10 × 1	P3	SY10.1MRLENA	1.5P	75	23	-	38	7	5.5	8	3	2	△
M12 × 1.75	P3	SY12.1PRLENA	1.5P	82	26	-	42	8.5	6.5	9	3	2	○
M12 × 1.5	P3	SY12.2ORLENA	1.5P	82	26	-	42	8.5	6.5	9	3	2	△
M12 × 1.25	P3	SY12.2NRLENA	1.5P	82	26	-	42	8.5	6.5	9	3	2	△
M12 × 1	P3	SY12.2MRLENA	1.5P	82	26	-	42	8.5	6.5	9	3	2	△
M14 × 2	P3	SY14.1QRLENA	1.5P	88	26	-	45	10.5	8	11	3	2	△
M14 × 1.5	P3	SY14.1ORLENA	1.5P	88	26	-	45	10.5	8	11	3	2	△
M16 × 2	P3	SY16.1QRLENA	1.5P	95	26	-	48	12.5	10	13	3	2	△
M16 × 1.5	P3	SY16.1ORLENA	1.5P	95	26	-	48	12.5	10	13	3	2	△



LO-SP

Low Spiral Fluted Taps

Specification



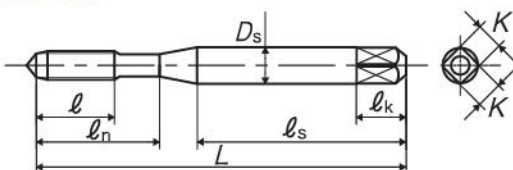
■Spiral flutes with low helix can break down chips and can eject them smoothly. Suitable for thermal refined high carbon steels and alloy tool steels. Effective in horizontal tapping.

Recommended Tapping Speeds depending on Materials

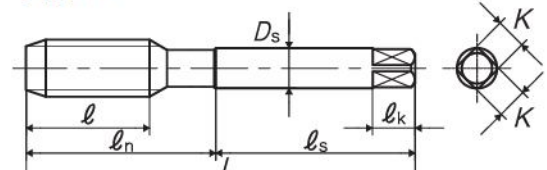
Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼
5~10 (m/min)	5~10 (m/min)

For icon explanation, refer to P.24

TYPE:1



TYPE:2



Segment : 1C

Size	Class	Code	Chamfer	Helix angle of spiral flutes	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	P1	LSHMP3.0G8	2.5P	8°	46	9	14	26	4	3.2	6	3	1	△
		LSHMP3.0G15		15°										
		LSHMP3.0G20		20°										
M4 × 0.7	P2	LSHMQ4.0I8	2.5P	8°	52	11	17	29	5	4	7	3	1	△
		LSHMQ4.0I15		15°										
		LSHMQ4.0I20		20°										
M5 × 0.8	P2	LSHMQ5.0K8	2.5P	8°	60	13	22	33	5.5	4.5	7	3	1	△
		LSHMQ5.0K15		15°										
		LSHMQ5.0K20		20°										
M6 × 1	P2	LSHMQ6.0M8	2.5P	8°	62	15	26	33	6	4.5	7	3	1	△
		LSHMQ6.0M15		15°										
		LSHMQ6.0M20		20°										
M8 × 1.25	P2	LSHMQ8.0N8	2.5P	8°	70	19	-	36	6.2	5	8	3	2	△
		LSHMQ8.0N15		15°										
		LSHMQ8.0N20		20°										
M10 × 1.5	P2	LSHMQ10.0O8	2.5P	8°	75	23	-	38	7	5.5	8	3	2	△
		LSHMQ10.0O15		15°										
		LSHMQ10.0O20		20°										
M12 × 1.75	P2	LSHMQ12.0P8	2.5P	8°	82	26	-	42	8.5	6.5	9	3	2	△
		LSHMQ12.0P15		15°										
		LSHMQ12.0P20		20°										

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

LS-LO-SP

Long Shank Low Spiral Fluted Taps

Specification



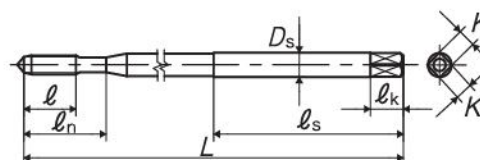
■Spiral flutes with low helix can break down chips and can eject them smoothly. LS-LO-SP is the long shank spiral fluted tap suitable for thermal refined high carbon steels and alloy tool steels. Effective in horizontal tapping.

Recommended Tapping Speeds depending on Materials

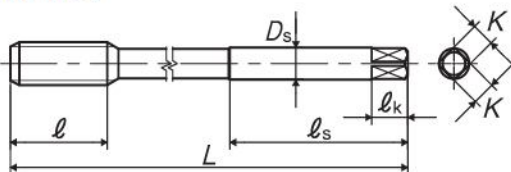
Medium carbon steels 中炭鋼類	High carbon steels 高炭鋼類
5~10 (m/min)	5~10 (m/min)

For icon explanation, refer to P.24

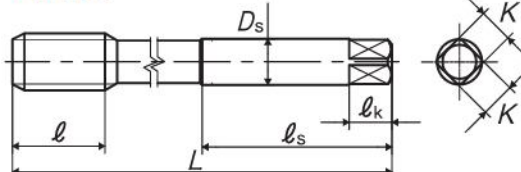
TYPE:1



TYPE:2



TYPE:3



Segment : 1C

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	Stock
For Metric Threads													
M6 × 1	P2	LSHM06.0ML10	2.5P	100	15	26	40	6	4.5	7	3	1	△
M8 × 1.25	P2	LSHM08.0NL10	2.5P	100	19	-	50	6.2	5	8	3	2	△
		LSHM08.0NL15		150									
M10 × 1.5	P2	LSHM0100L15	2.5P	150	23	-	50	7	5.5	8	3	2	△
M10 × 1.25	P2	LSHM010NL15	2.5P	150	23	-	50	7	5.5	8	3	2	△
M12 × 1.75	P2	LSHM012PL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
M12 × 1.5	P2	LSHM0120L15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
M12 × 1.25	P2	LSHM012NL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	△
M14 × 2	P2	LSHM014QL15	2.5P	150	26	-	60	10.5	8	11	3	2	△
M14 × 1.5	P2	LSHM0140L15	2.5P	150	26	-	60	10.5	8	11	3	2	△
M16 × 2	P2	LSHM016QL15	2.5P	150	26	-	60	12.5	10	13	3	2	△
		LSHM016QL20		200									
M16 × 1.5	P2	LSHM0160L15	2.5P	150	26	-	60	12.5	10	13	3	2	△
		LSHM0160L20		200									
M18 × 2.5	P3	LSHMR018RL20	2.5P	200	33	-	70	14	11	14	4	2	△
M18 × 1.5	P2	LSHM0180L20	2.5P	200	33	-	70	14	11	14	4	2	△
M20 × 2.5	P3	LSHMR020RL20	2.5P	200	33	-	70	15	12	15	4	3	△
M20 × 1.5	P3	LSHMR0200L20	2.5P	200	33	-	70	15	12	15	4	3	△
M22 × 2.5	P3	LSHMR022RL20	2.5P	200	33	-	70	17	13	16	4	3	△
M22 × 1.5	P3	LSHMR0220L20	2.5P	200	33	-	70	17	13	16	4	3	△
M24 × 3	P3	LSHMR024SL20	2.5P	200	39	-	80	19	15	18	4	3	△
M24 × 1.5	P3	LSHMR0240L20	2.5P	200	39	-	80	19	15	18	4	3	△

MC-SP

Spiral Fluted Taps with Internal Coolant Hole

Specification



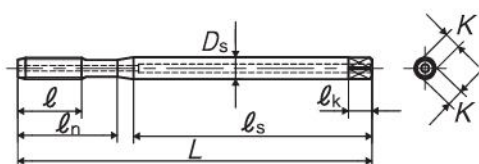
■Through internal coolant hole (center through type), satisfactory amount of oil is supplied to the exact cutting area. MC-SP spiral fluted tap ensures a long tool life as well as cuts high precision threads with good surface finish.

Recommended Tapping Speeds depending on Materials

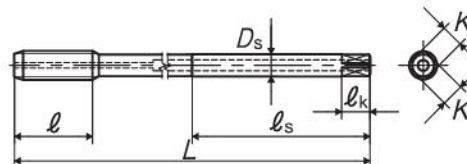
Medium carbon steels
中炭鋼
5~10
(m/min)

For icon explanation, refer to P.24

TYPE:1



TYPE:2



Segment : 1C

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													
M6 × 1	P2	MSHQ6.0ML10	2.5P	100	19	28	40	6	4.5	7	3	1	△
		MSHQ6.0ML15		150									
M8 × 1.25	P2	MSHQ8.0NL10	2.5P	100	22	-	50	6.2	5	8	3	2	△
		MSHQ8.0NL15		150									
M10 × 1.5	P2	MSHQ0100L10	2.5P	100	24	-	50	7	5.5	8	3	2	△
		MSHQ0100L15		150									
M10 × 1.25	P2	MSHQ010NL10	2.5P	100	24	-	50	7	5.5	8	3	2	△
M12 × 1.75	P2	MSHQ012PL10	2.5P	100	29	-	50	8.5	6.5	9	3	2	△
		MSHQ012PL15		150									
M12 × 1.5	P2	MSHQ0120L10	2.5P	100	29	-	50	8.5	6.5	9	3	2	△
M12 × 1.25	P2	MSHQ012NL10	2.5P	100	29	-	50	8.5	6.5	9	3	2	△
M14 × 2	P2	MSHQ014QL15	2.5P	150	30	-	60	10.5	8	11	3	2	△
M16 × 2	P2	MSHQ016QL15	2.5P	150	32	-	60	12.5	10	13	3	2	△
M18 × 2.5	P3	MSHR018RL15	2.5P	150	37	-	70	14	11	14	4	2	△
M20 × 2.5	P3	MSHR020RL15	2.5P	150	37	-	70	15	12	15	4	2	△
M22 × 2.5	P3	MSHR022RL15	2.5P	150	38	-	70	17	13	16	4	2	△
M24 × 3	P3	MSHR024SL15	2.5P	150	45	-	80	19	15	18	4	2	△

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

ZET-B

Spiral Fluted Taps for Titanium Alloys Specification

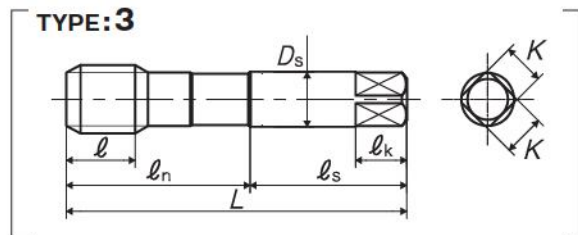
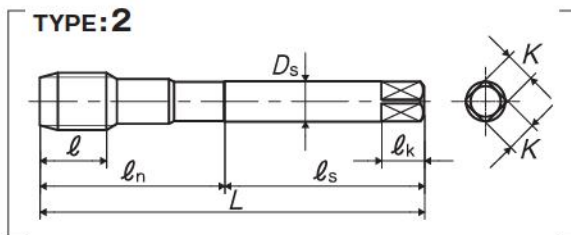
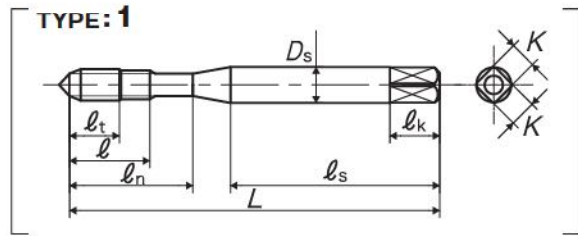


■Spiral Fluted Tap suitable for titanium alloys which, including titanium as the main composition, are tough, light and heat resistant.

Recommended Tapping Speeds depending on Materials

Titanium alloys
チタン合金
5~10
(m/min)

For icon explanation, refer to P.24



Segment : 1C

Size	Class	Code	Chamfer	L (mm)	ℓ_t (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	Type	Stock
For Metric Threads														
M3 × 0.5	P2	ZETBMQ3.0G	3P	46	5	9	14	26	4	3.2	6	3	1	○
M4 × 0.7	P3	ZETBMR4.0I	3P	52	7	11	17	29	5	4	7	3	1	○
M5 × 0.8	P3	ZETBMR5.0K	3P	60	9	13	22	33	5.5	4.5	7	3	1	○
M6 × 1	P3	ZETBMR6.0M	3P	62	11	15	26	33	6	4.5	7	3	1	○
M8 × 1.25	P3	ZETBMR8.0N	3P	70	-	12	-	36	6.2	5	8	3	2	○
M10 × 1.5	P3	ZETBMR0100	3P	75	-	13	-	38	7	5.5	8	3	2	○
M10 × 1.25	P3	ZETBMR010N	3P	75	-	13	-	38	7	5.5	8	3	2	○
M12 × 1.75	P3	ZETBMR012P	3P	82	-	15	-	42	8.5	6.5	9	3	2	○
M12 × 1.5	P3	ZETBMR0120	3P	82	-	15	-	42	8.5	6.5	9	3	2	△
M12 × 1.25	P3	ZETBMR012N	3P	82	-	15	-	42	8.5	6.5	9	3	2	△
M14 × 2	P3	ZETBMR014Q	3P	88	-	18	-	45	10.5	8	11	3	2	△
M14 × 1.5	P3	ZETBMR0140	3P	88	-	14	-	45	10.5	8	11	3	2	△
M16 × 2	P3	ZETBMR016Q	3P	95	-	18	-	48	12.5	10	13	4	2	△
M16 × 1.5	P3	ZETBMR0160	3P	95	-	14	-	48	12.5	10	13	4	2	△
M18 × 2.5	P4	ZETBMS018R	3P	100	-	20	-	51	14	11	14	4	2	△
M18 × 1.5	P3	ZETBMR0180	3P	100	-	14	-	51	14	11	14	4	2	△
M20 × 2.5	P4	ZETBMS020R	3P	105	-	20	-	50	15	12	15	4	3	△
M20 × 1.5	P4	ZETBMS0200	3P	105	-	14	-	50	15	12	15	4	3	△

ZEN-B

Spiral Fluted Taps for Nickel Base Alloys

Specification

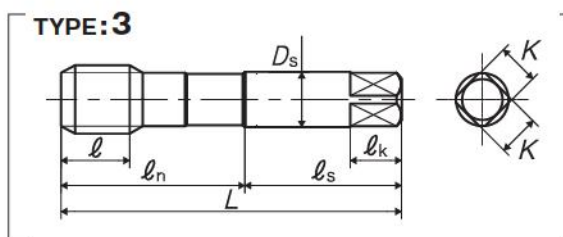
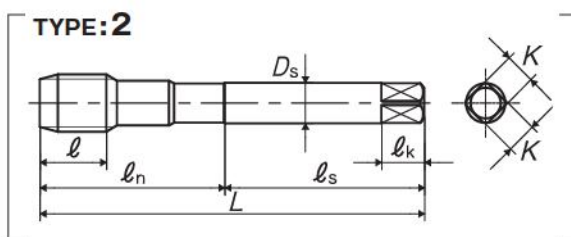
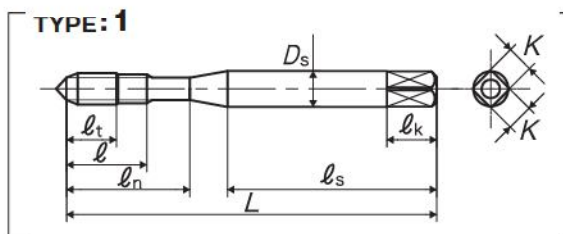


■ZEN-B is the spiral fluted tap for nickel base alloys which, with nickel as main composition, have much higher corrosion resistance and much higher heat resistance than steels.

Recommended Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼	Stainless steels ステンレス鋼	Nickel base alloys ニッケル基合金
5~15 (m/min)	5~15 (m/min)	5~15 (m/min)	5~10 (m/min)

For icon explanation, refer to P.24



Segment : 1C

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	ZENBMQ3.0G	3P	46	5	9	14	26	4	3.2	6	3	1	○
M4 × 0.7	P3	ZENBMR4.0I	3P	52	7	11	17	29	5	4	7	3	1	○
M5 × 0.8	P3	ZENBMR5.0K	3P	60	9	13	22	33	5.5	4.5	7	3	1	○
M6 × 1	P3	ZENBMR6.0M	3P	62	11	15	26	33	6	4.5	7	3	1	○
M8 × 1.25	P3	ZENBMR8.0N	3P	70	-	12	-	36	6.2	5	8	3	2	○
M10 × 1.5	P3	ZENBMR0100	3P	75	-	13	-	38	7	5.5	8	3	2	○
M10 × 1.25	P3	ZENBMR010N	3P	75	-	13	-	38	7	5.5	8	3	2	○
M12 × 1.75	P3	ZENBMR012P	3P	82	-	15	-	42	8.5	6.5	9	3	2	○
M12 × 1.5	P3	ZENBMR0120	3P	82	-	15	-	42	8.5	6.5	9	3	2	△
M12 × 1.25	P3	ZENBMR012N	3P	82	-	15	-	42	8.5	6.5	9	3	2	△
M14 × 2	P3	ZENBMR014Q	3P	88	-	18	-	45	10.5	8	11	3	2	△
M14 × 1.5	P3	ZENBMR0140	3P	88	-	14	-	45	10.5	8	11	3	2	△
M16 × 2	P3	ZENBMR016Q	3P	95	-	18	-	48	12.5	10	13	3	2	△
M16 × 1.5	P3	ZENBMR0160	3P	95	-	14	-	48	12.5	10	13	3	2	△
M18 × 2.5	P4	ZENBMS018R	3P	100	-	20	-	51	14	11	14	4	2	△
M18 × 1.5	P3	ZENBMR0180	3P	100	-	14	-	51	14	11	14	4	2	△
M20 × 2.5	P4	ZENBMS020R	3P	105	-	20	-	50	15	12	15	4	3	△
M20 × 1.5	P4	ZENBMS0200	3P	105	-	14	-	50	15	12	15	4	3	△

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

PM-SP

Spiral Fluted Taps for Hard-to-Machine Materials

Specification

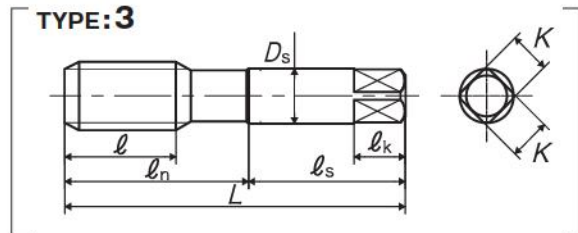
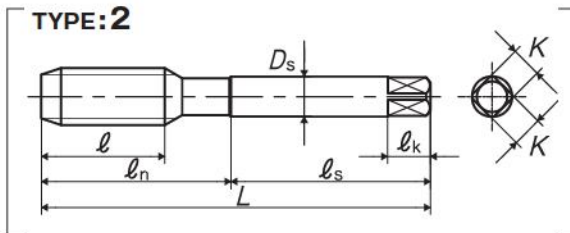
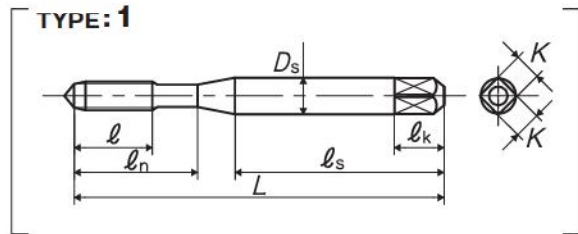


■Spiral Fluted Tap suitable for tapping hard steels with hardness between 35-45HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and mold steels.

Recommended Tapping Speeds depending on Materials

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

For icon explanation, refer to P.24



Segment : 1C

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	Stock
For Metric Threads													
M3 × 0.5	P3	-	2.75P	46	9	14	26	4	3.2	6	3	1	△
M4 × 0.7	P3	-	2.75P	52	11	17	29	5	4	7	3	1	△
M5 × 0.8	P3	-	2.75P	60	13	22	33	5.5	4.5	7	3	1	△
M6 × 1	P3	-	2.75P	62	15	26	33	6	4.5	7	3	1	△
M8 × 1.25	P3	-	2.75P	70	19	-	36	6.2	5	8	3	2	△
M10 × 1.5	P3	-	2.75P	75	23	-	38	7	5.5	8	3	2	△
M10 × 1.25	P3	-	2.75P	75	23	-	38	7	5.5	8	3	2	△
M12 × 1.75	P3	-	2.75P	82	26	-	42	8.5	6.5	9	3	2	△
M16 × 2	P4	-	2.75P	95	26	-	48	12.5	10	13	3	2	△
M16 × 1.5	P3	-	2.75P	95	26	-	48	12.5	10	13	3	2	△
M20 × 2.5	P4	-	2.75P	105	33	-	50	15	12	15	3	3	△
M24 × 3	P4	-	2.75P	120	39	-	55	19	15	18	4	3	△

LS-PM-SP

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

Specification



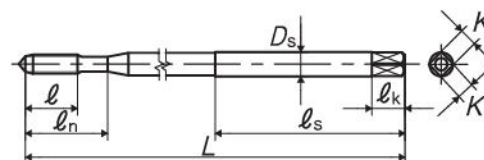
■ Long shank spiral fluted tap suitable for tapping hard steels with hardness between 35-45HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and mold steels.

Recommended Tapping Speeds depending on Materials

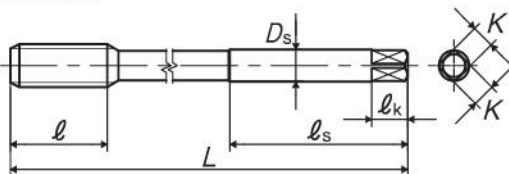
High carbon steels 高炭素鋼	Thermal refined steels 熱質鋼	Thermal refined steels 熱質鋼
5~10 (m/min)	~5 (m/min)	~5 (m/min)
	25~35HRC	35~45HRC

For icon explanation, refer to P.24

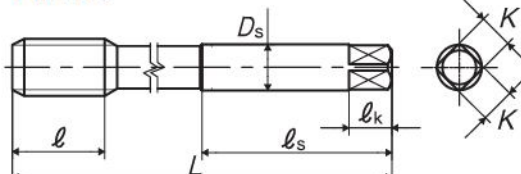
TYPE:1



TYPE:2



TYPE:3



Segment : 1C

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	-	2.75P	100	11	17	40	5	4	7	3	1	△
M5 × 0.8	P3	-	2.75P	100	13	22	40	5.5	4.5	7	3	1	△
M6 × 1	P3	-	2.75P	100	15	26	40	6	4.5	7	3	1	△
M8 × 1.25	P3	-	2.75P	100 150	19	-	50	6.2	5	8	3	2	△
M10 × 1.5	P3	-	2.75P	150	23	-	50	7	5.5	8	3	2	△
M12 × 1.75	P3	-	2.75P	150	26	-	50	8.5	6.5	9	3	2	△
M16 × 2	P4	-	2.75P	150	26	-	60	12.5	10	13	3	2	△
M20 × 2.5	P4	-	2.75P	150	33	-	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

SP-61

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

F-SP

Spiral Fluted Taps for High Speed Tapping

Specification

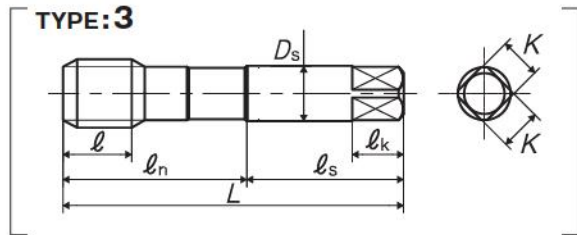
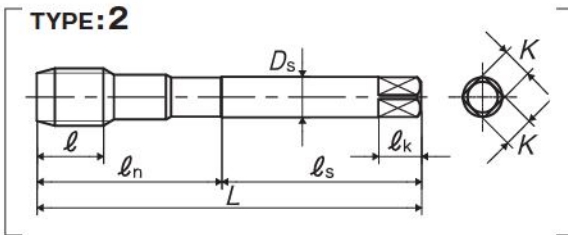
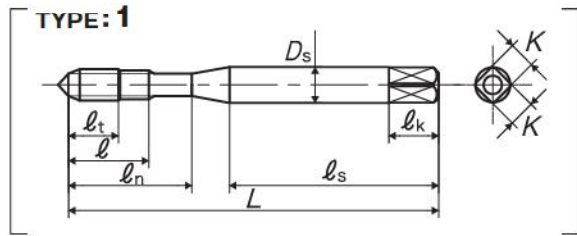


■ Spiral Fluted Tap applicable for such high speed tapping as 15m/min to 25m/min. Under low tapping speed, poor chip shape and poor chip ejection may occur and cause tapping troubles.

Recommended Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼
15~25 (m/min)	15~25 (m/min)

For icon explanation, refer to P.24



Segment : 1C

Size	Class	Code	Chamfer	L (mm)	ℓ_t (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	Type	Stock
For Metric Threads														
M3 × 0.5	P2	VFSHM3.0G	2.5P	46	5	9	14	26	4	3.2	6	3	1	○
M4 × 0.7	P2	VFSHM4.0I	2.5P	52	7	11	17	29	5	4	7	3	1	○
M5 × 0.8	P2	VFSHM5.0K	2.5P	60	9	13	22	33	5.5	4.5	7	3	1	○
M6 × 1	P2	VFSHM6.0M	2.5P	62	11	15	26	33	6	4.5	7	3	1	○
M8 × 1.25	P3	VFSHMR8.0N	2.5P	70	-	12	-	36	6.2	5	8	3	2	○
M10 × 1.5	P3	VFSHMR0100	2.5P	75	-	13	-	38	7	5.5	8	3	2	○
M10 × 1.25	P3	VFSHMR010N	2.5P	75	-	13	-	38	7	5.5	8	3	2	○
M12 × 1.75	P4	VFSHMS012P	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	○
M12 × 1.5	P3	VFSHMR0120	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	○
M12 × 1.25	P4	VFSHMS012N	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	○
M16 × 2	P4	-	2.5P	95	-	18	-	48	12.5	10	13	3	2	△
M20 × 2.5	P4	-	2.5P	105	-	20	-	50	15	12	15	3	3	△



LS-F-SP

Long Shank Spiral Fluted Taps for High Speed Tapping

Specification



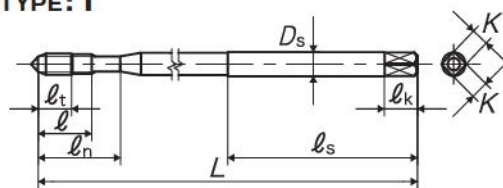
■ Long Shank Spiral Fluted Tap applicable for such high speed tapping as 15m/min to 25m/min. Under low tapping speed, poor chip shape and poor chip ejection may occur and cause tapping troubles.

Recommended Tapping Speeds depending on Materials

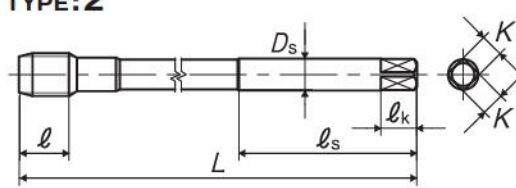
Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼
15~25 (m/min)	15~25 (m/min)

For icon explanation, refer to P.24

TYPE:1



TYPE:2



Segment : 1C

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	-	2.5P	100	5	9	14	40	4	3.2	6	3	1	△
M4 × 0.7	P2	-	2.5P	100	7	11	17	40	5	4	7	3	1	△
M5 × 0.8	P2	-	2.5P	100	9	13	22	40	5.5	4.5	7	3	1	△
M6 × 1	P2	-	2.5P	100	11	15	26	40	6	4.5	7	3	1	△
M8 × 1.25	P3	-	2.5P	100	-	12	-	50	6.2	5	8	3	2	△
M10 × 1.5	P3	-	2.5P	100	-	13	-	50	7	5.5	8	3	2	△
M12 × 1.75	P4	-	2.5P	150	-	15	-	50	8.5	6.5	9	3	2	△
M16 × 2	P4	-	2.5P	150	-	18	-	60	12.5	10	13	3	2	△

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

HFIHS



For Ultra Fast Tapping, Vertical Use. Spiral Fluted Taps for Carbon Steels

Specification

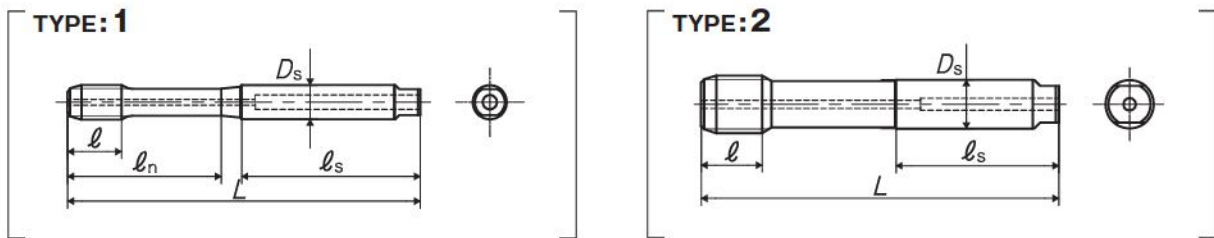


■ Applicable for ultra high speed tapping. Having internal coolant hole(center through type), HFIHS is suitable for carbon steels and alloy steels, blind hole use. Vertical tapping use.

Recommended Tapping Speeds depending on Materials

Low carbon steels 低碳鋼	Medium carbon steels 中炭鋼	High carbon steels 高炭鋼	Alloy steels 合金鋼
20~50 (m/min)	20~50 (m/min)	20~30 (m/min)	20~30 (m/min)

For icon explanation, refer to P.24



Segment : 1C

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	Stock
For Metric Threads													
M6 × 1	P4	HFIHSS6.0M	2.5P	62	11	27	32	6	-	-	3	1	○
M8 × 1.25	P4	HFIHSS8.0N	2.5P	70	12	-	36	8	-	-	3	2	○
M10 × 1.5	P4	HFIHSS0100	2.5P	75	13	-	37	10	-	-	3	2	○
M10 × 1.25	P4	HFIHSS010N	2.5P	75	12	-	37	10	-	-	3	2	○
M12 × 1.75	P4	HFIHSS012P	2.5P	82	15	-	40	12	-	-	3	2	○
M12 × 1.5	P4	HFIHSS0120	2.5P	82	14	-	40	12	-	-	3	2	○
M12 × 1.25	P4	HFIHSS012N	2.5P	82	14	-	40	12	-	-	3	2	○
M14 × 1.5	P4	HFIHSS0140	2.5P	88	14	-	40	12	-	-	3	2	○
M16 × 1.5	P4	HFIHSS0160	2.5P	95	14	-	43	16	-	-	3	2	○
M18 × 1.5	P4	HFIHSS0180	2.5P	100	14	-	45	16	-	-	4	2	○
M20 × 1.5	P5	HFIHST0200	2.5P	105	14	-	45	16	-	-	4	2	○



HFISP

For Ultra Fast Tapping, Horizontal Use. Low Spiral Fluted Taps for Carbon Steels
Specification



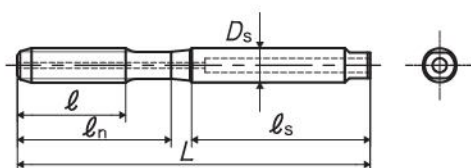
■Applicable for ultra high speed tapping. Having internal coolant hole(center through hole), HFISP is suitable for carbon steels and alloy steels, blind hole use. Effective in horizontal tapping use.

Recommended Tapping Speeds depending on Materials

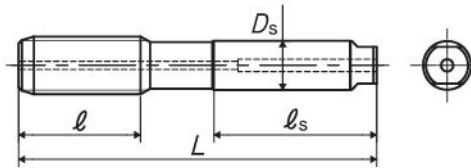
Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼
20~50 (m/min)	20~50 (m/min)	20~30 (m/min)	20~30 (m/min)

For icon explanation, refer to P.24

TYPE:1



TYPE:2



Segment : 1C

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	P4	HFISPS6.0M	2.5P	62	19	27	32	6	-	-	3	1	○
M8 × 1.25	P4	HFISPS8.0N	2.5P	70	22	-	36	8	-	-	3	2	○
M10 × 1.5	P4	HFISPS0100	2.5P	75	24	-	37	10	-	-	3	2	○
M10 × 1.25	P4	HFISPS010N	2.5P	75	24	-	37	10	-	-	3	2	○
M12 × 1.75	P4	HFISPS012P	2.5P	82	29	-	40	12	-	-	3	2	○
M12 × 1.5	P4	HFISPS0120	2.5P	82	29	-	40	12	-	-	3	2	○
M12 × 1.25	P4	HFISPS012N	2.5P	82	29	-	40	12	-	-	3	2	○
M14 × 1.5	P4	HFISPS0140	2.5P	88	30	-	40	12	-	-	3	2	○
M16 × 1.5	P4	HFISPS0160	2.5P	95	32	-	43	16	-	-	3	2	○
M18 × 1.5	P4	HFISPS0180	2.5P	100	37	-	45	16	-	-	4	2	○
M20 × 1.5	P5	HFISPT0200	2.5P	105	37	-	45	16	-	-	4	2	○

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

HFAHS



For Ultra Fast Tapping, Vertical Use. Spiral Fluted Taps for Aluminum

Specification

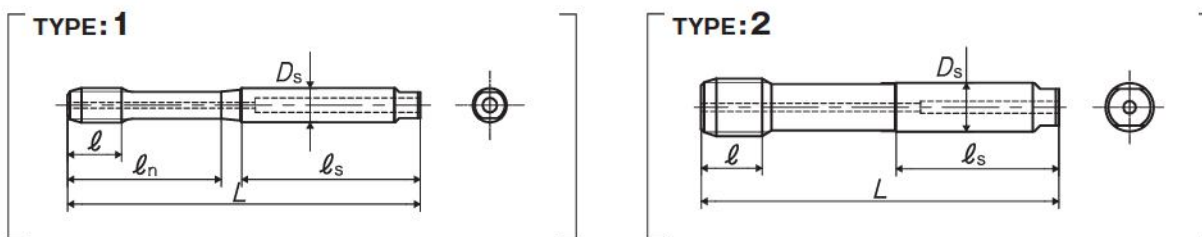


■ Applicable for ultra high speed tapping. Having internal coolant hole(center through hole), HFAHS is suitable for aluminum castings, blind hole use. Effective in vertical tapping use.

Recommended Tapping Speeds depending on Materials

Wrought aluminum アルミ圧延材 30~100 (m/min)	Aluminum alloy castings アルミ合金鑄物 30~100 (m/min)	Magnesium alloy die casting マグネシウム合金鑄物 30~100 (m/min)	Zinc alloy castings 亜鉛合金鑄物 30~100 (m/min)
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For icon explanation, refer to P.24



Segment : 1C

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	Stock
For Metric Threads													
M6 × 1	P4	HFAHSS6.0M	2.5P	62	11	27	32	6	-	-	3	1	○
M8 × 1.25	P4	HFAHSS8.0N	2.5P	70	12	-	36	8	-	-	3	2	○
M10 × 1.5	P4	HFAHSS0100	2.5P	75	13	-	37	10	-	-	3	2	○
M10 × 1.25	P4	HFAHSS010N	2.5P	75	12	-	37	10	-	-	3	2	○
M12 × 1.75	P4	HFAHSS012P	2.5P	82	15	-	40	12	-	-	3	2	○
M12 × 1.5	P4	HFAHSS0120	2.5P	82	14	-	40	12	-	-	3	2	○
M12 × 1.25	P4	HFAHSS012N	2.5P	82	14	-	40	12	-	-	3	2	○
M14 × 1.5	P4	HFAHSS0140	2.5P	88	14	-	40	12	-	-	3	2	○
M16 × 1.5	P4	HFAHSS0160	2.5P	95	14	-	43	16	-	-	3	2	○
M18 × 1.5	P4	HFAHSS0180	2.5P	100	14	-	45	16	-	-	3	2	○
M20 × 1.5	P5	HFAHST0200	2.5P	105	14	-	45	16	-	-	3	2	○

HFASP

For Ultra Fast Tapping, Horizontal Use. Low Spiral Fluted Taps for Aluminum
Specification



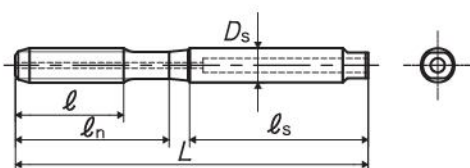
■Applicable for ultra high speed tapping. Having internal coolant hole(center through type), HFASP is suitable for aluminum castings, blind hole use. Effective in horizontal tapping use.

Recommended Tapping Speeds depending on Materials

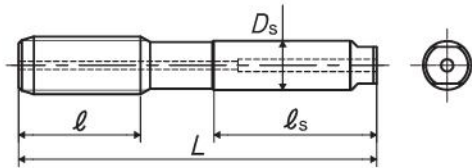
Wrought aluminum アルミ圧延材	Aluminum alloy castings アルミ合金鋳物	Magnesium alloy die casting マグネシウム合金鋳物	Zinc alloy castings 亜鉛合金鋳物
30~100 (m/min)	30~100 (m/min)	30~100 (m/min)	30~100 (m/min)

For icon explanation, refer to P.24

TYPE:1



TYPE:2



Segment : 1C

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	P4	HFASPS6.0M	2.5P	62	19	27	32	6	-	-	3	1	○
M8 × 1.25	P4	HFASPS8.0N	2.5P	70	22	-	36	8	-	-	3	2	○
M10 × 1.5	P4	HFASPS0100	2.5P	75	24	-	37	10	-	-	3	2	○
M10 × 1.25	P4	HFASPS010N	2.5P	75	24	-	37	10	-	-	3	2	○
M12 × 1.75	P4	HFASPS012P	2.5P	82	29	-	40	12	-	-	3	2	○
M12 × 1.5	P4	HFASPS0120	2.5P	82	29	-	40	12	-	-	3	2	○
M12 × 1.25	P4	HFASPS012N	2.5P	82	29	-	40	12	-	-	3	2	○
M14 × 1.5	P4	HFASPS0140	2.5P	88	30	-	40	12	-	-	3	2	○
M16 × 1.5	P4	HFASPS0160	2.5P	95	32	-	43	16	-	-	3	2	○
M18 × 1.5	P4	HFASPS0180	2.5P	100	37	-	45	16	-	-	3	2	○
M20 × 1.5	P5	HFASPT0200	2.5P	105	37	-	45	16	-	-	3	2	○

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

HDISP

For Dry Tapping, Blind Hole Use. Spiral Fluted Taps for Steels

Specification

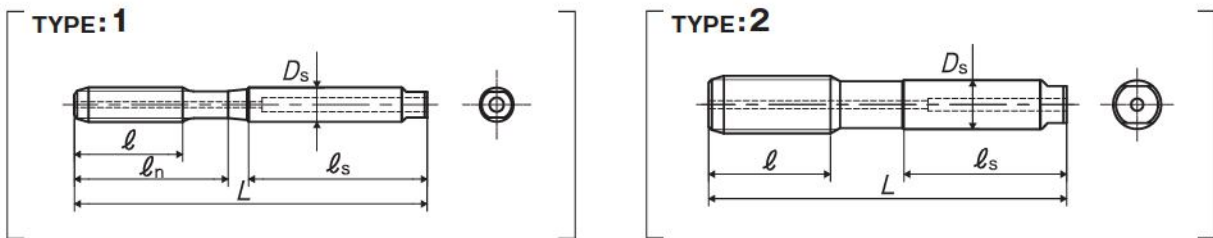


■Applicable for the tapping under mist or dry condition. Having internal coolant hole(center through type), HDISP is suitable for carbon steels and alloy steels, blind hole use. For both horizontal and vertical tapping use.

Recommended Tapping Speeds depending on Materials

High carbon steels 高炭素鋼	Alloy steels 合金鋼
10~20 (m/min)	10~20 (m/min)

For icon explanation, refer to P.24



Segment : 1D

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	Stock
For Metric Threads													
M6 × 1	P4	HDISPS6.0M	2.5P	62	19	27	32	6	-	-	3	1	○
M8 × 1.25	P4	HDISPS8.0N	2.5P	70	22	-	36	8	-	-	3	2	○
M10 × 1.5	P4	HDISPS0100	2.5P	75	24	-	37	10	-	-	3	2	○
M10 × 1.25	P4	HDISPS010N	2.5P	75	24	-	37	10	-	-	3	2	○
M12 × 1.75	P4	HDISPS012P	2.5P	82	29	-	40	12	-	-	3	2	○
M12 × 1.5	P4	HDISPS0120	2.5P	82	29	-	40	12	-	-	3	2	○
M12 × 1.25	P4	HDISPS012N	2.5P	82	29	-	40	12	-	-	3	2	○
M14 × 1.5	P4	HDISPS0140	2.5P	88	30	-	40	12	-	-	3	2	○
M16 × 1.5	P4	HDISPS0160	2.5P	95	32	-	43	16	-	-	3	2	○
M18 × 1.5	P4	HDISPS0180	2.5P	100	37	-	45	16	-	-	4	2	○
M20 × 1.5	P5	HDISPT0200	2.5P	105	37	-	45	16	-	-	4	2	○

HDASP

For Dry Tapping, Blind Hole Use. Spiral Fluted Taps for Aluminum

Specification



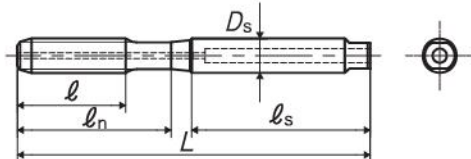
■Applicable for the tapping under mist or dry condition. Having internal coolant hole(center through type), HDASP is suitable for aluminum castings, blind hole use. For both horizontal and vertical tapping use.

Recommended Tapping Speeds depending on Materials

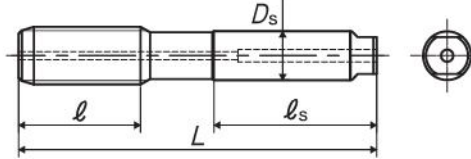
Wrought aluminum アルミ圧延材	Aluminum alloy castings アルミ合金鋳物	Magnesium alloy castings マグネシウム合金鋳物	Zinc alloy castings 亜鉛合金鋳物
20~50 (m/min)	20~50 (m/min)	20~50 (m/min)	20~50 (m/min)

For icon explanation, refer to P.24

TYPE:1



TYPE:2



Segment : 1D

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	P4	HDASPS6.0M	2.5P	62	19	27	32	6	-	-	3	1	○
M8 × 1.25	P4	HDASPS8.0N	2.5P	70	22	-	36	8	-	-	3	2	○
M10 × 1.5	P4	HDASPS0100	2.5P	75	24	-	37	10	-	-	3	2	○
M10 × 1.25	P4	HDASPS010N	2.5P	75	24	-	37	10	-	-	3	2	○
M12 × 1.75	P4	HDASPS012P	2.5P	82	29	-	40	12	-	-	3	2	○
M12 × 1.5	P4	HDASPS0120	2.5P	82	29	-	40	12	-	-	3	2	○
M12 × 1.25	P4	HDASPS012N	2.5P	82	29	-	40	12	-	-	3	2	○
M14 × 1.5	P4	HDASPS0140	2.5P	88	30	-	40	12	-	-	3	2	○
M16 × 1.5	P4	HDASPS0160	2.5P	95	32	-	43	16	-	-	3	2	○
M18 × 1.5	P4	HDASPS0180	2.5P	100	37	-	45	16	-	-	3	2	○
M20 × 1.5	P5	HDASPT0200	2.5P	105	37	-	45	16	-	-	3	2	○

SPIRAL FLUTED TAP SERIES FOR THROUGH HOLE



XSL	SL-1
AU+SL	SL-3
AUXSL	SL-5
SU+SL	SL-7
SUXSL	SL-9
ZET-P	SL-10
F-SL	SL-11
LS-F-SL	SL-12
HDISL	SL-13
MHSL	SL-15