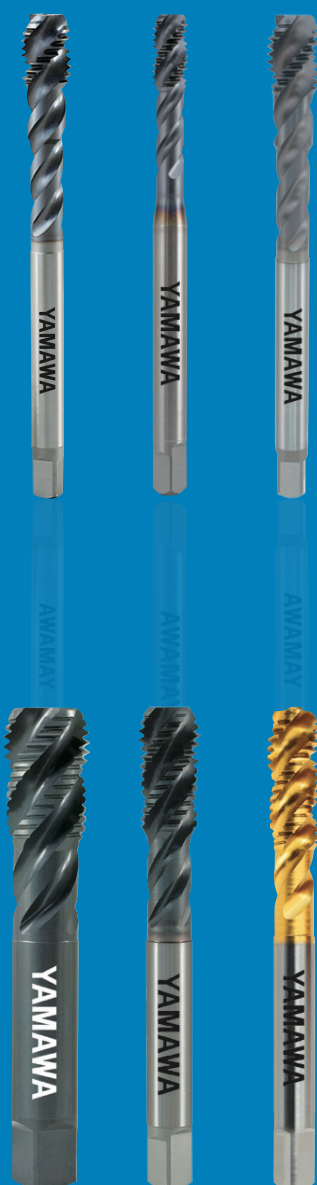


JIS • ANSI • DIN

LINE UP

1 SPIRAL FLUTED TAP SERIES FOR BLIND HOLE



	JIS	ANSI	DIN
Z-PRO VUSP	①-5	①-9	①-11
Z-PRO VUSP 1.5P	①-15	①-17	
Z-PRO VUSP E			①-19
Z-PRO VUSP CH	①-21	①-23	①-24
Z-PRO HVSP	①-25	①-32	①-36
Z-PRO HVSP LH	①-39	①-41	①-43
Z-PRO HVSP ZP	①-45		
Z-PRO MHSP	①-47		①-49
SP	①-51	①-60	①-66
+SP	①-71		
SP 1.5P	①-72		
ISP	①-75	①-77	
SP OX	①-78	①-82	①-87
SP		①-92	
SP LH	①-93		①-95
SP V			①-96
AU+SP	①-99	①-101	①-102
LS-SP	①-103		
LS-SP OX	①-108		
LS-SP LH	①-109		
LS-SP V	①-110		
LS-SP-K	①-111		
SU+SP			
SU - SP	①-113		
ZELX SS SP		①-118	
SP - VA			①-123
SP+VA			①-126
SP-VA E			①-127
SP-VA (coating)			①-129
SU-SP LH	①-130		
SU2-SP	①-131		①-133
SU-S-SP	①-135		
LS-SU-S-SP	①-136		
ZELX SS SP 6"		①-138	
S-SP	①-139		
SP-BLF			①-142
SP-BLF OX			①-143
SP-BLF (coating)			①-144
E-SP	①-145		
HC+SP	①-147		
HC - SP			
HC+SP OX	①-150		
HC - SP OX			
AL+SP	①-151		①-155
AL - SP			①-153
ALS-SP			①-156
AL-SP 1.5P	①-158		
LO-SP	①-159	①-161	①-162

	JIS	ANSI	DIN
LO-SP OX			①-164
LS-LO-SP	①-167		
ZET-B	①-169		①-175
ZELX TI SP		①-172	
ZEN-B	①-177		①-184
ZELX NI SP		①-181	
PM-SP	①-186	①-188	①-189
PH-SP			①-191
LS-PM-SP	①-193		
F-SP	①-195		①-199
ZELX FR		①-197	
LS-F-SP	①-200		
HFIHS	①-203		①-205
HFISP	①-207		①-209
HFAHS	①-211		①-213
HFASP	①-215		①-217
HDISP	①-219		①-221
HDASP	①-223		①-225
MC-SP	①-227		

Selection chart of taps

Tapping conditions		Machining, in low-speed tapping area										
Product symbol		ISP	SP	LS-SP	LS-SP-K	SP LH	LS-SP LH	LO-SP	LS-LO-SP	SP 1.5P	SP OX	
Tap material Surface treatment		HSS OX	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS OX	
Name		I series	For general use	Long, for general use	Long neck	For general use For left-hand threads	Long, for general use For left-hand threads	Low helix for general use	Long, low helix for general use	Short chamfer for general use	Oxidized	
												
Bored Hole Shape												
For Metric Threads		①-76	①-53	①-103	①-111	①-93	①-109	①-160	①-167	①-72	①-79	
For Unified Threads			①-57	①-106		①-94					①-80	
For Whitworth Threads			①-59	①-107		①-94					①-80	
For Screw Threads used on Sewing Machines			①-59									
Pipe Threads												
American Pipe Threads												
For Miniature Threads												
For Trapezoidal Threads												
⑦ Special Thread Taps Simple Inspection Tools		~S25C	Low carbon steels	◆	○						◆	○
		S25C~S45C	Medium carbon steels	◆	○	◆	○	◆	○	◆	○	◆
		S45C~	High carbon steels	◆	○	◆	○	◆	○	◆	○	◆
		SCM	Alloy steels									
⑧ Pipe Taps		25~35HRC	Heat treated steel									
		35~45HRC	Heat treated steel									
		45~55HRC	Heat treated steel									
		55~63HRC	Heat treated steel									
⑨ Thread Mills Premium Thread Mills		SUS	Stainless steels (SUS)									
		SKD	Tool steels									
		SC	Cast steels									
		FC	Cast irons									
⑩ Dies		FCD	Ductile cast irons									
		Cu	Copper									
		Bs	Brass									
		BsC	Brass castings									
		PB	Bronze									
⑪ Center Drills Centering Tools		AL	Wrought aluminum									
		AC, ADC	Aluminum alloy casting									
		Mg	Magnesium alloy die castings									
		ZDC	Zinc alloy die castings									
⑫ Precision Machinery/ Medical Surgical Instruments			Titanium alloys									
			Nickel base alloys									
			Thermosetting plastic									
			Thermoplastic resin									

Selection chart of taps

Tapping conditions		Machining, in low/middle speed tapping area						Machining, in middle speed tapping area				
Product symbol		LS-SU-S-SP	S-SP	LS-SP V	PM-SP	LS-PM-SP	MC-SP	Z-PRO VUSP	Z-PRO VUSP 1.5P	Z-PRO VUSP CH	AU+SP	
Tap material		HSS	OX	HSS	OX	HSS	Coating	HSS-P	HSS-P	HSS	HSS	
Surface treatment												
Name		Long, for deep hole stainless steel	For deep hole	Long, coated	For hard-to-machine materials	Long, for hard-to-machine materials	With oil hole	Coated	Short chamfer coated	Coolant through hole coated	Coated	
												
Bored Hole Shape												
For Metric Threads		①-136	①-139	①-110	①-186	①-193	①-227	①-6	①-16	①-22	①-100	
For Unified Threads					①-187							
For Whitworth Threads												
For Screw Threads used on Sewing Machines												
Pipe Threads												
American Pipe Threads												
For Miniature Threads												
For Trapezoidal Threads												

~S25C	Low carbon steels	◆	○			◆	○				◆	○	◆	○	◆	○	
S25C~S45C	Medium carbon steels	◆	○	◆	○	◆	○				◆	○	◆	○	◆	○	
S45C~	High carbon steels	◆	○	◆	○	◆	○	◆	○	◆	○	◆	○	◆	○	◆	○
SCM	Alloy steels			◆	○	◆	○				◆	○	◆	○	◆	○	
25~35HRC	Heat treated steel					◆	○	◆	○								
35~45HRC	Heat treated steel					◆	○	◆	○								
45~55HRC	Heat treated steel																
55~63HRC	Heat treated steel																
SUS	Stainless steels (SUS)	◆	○					◆	○	◆	○	◆	○	◆	○	◆	○
SKD	Tool steels							◆	○	◆	○	◆	○	◆	○		
SC	Cast steels																
FC	Cast irons																
FCD	Ductile cast irons			◆	○			◆	○	◆	○	◆	○				
Cu	Copper																
Bs	Brass																
BsC	Brass castings																
PB	Bronze																
AL	Wrought aluminum							◆	○	◆	○	◆	○				
AC, ADC	Aluminum alloy casting							◆	○	◆	○	◆	○	◆	○		
Mg	Magnesium alloy die castings																
ZDC	Zinc alloy die castings													◆	○		
	Titanium alloys																
	Nickel base alloys																
	Thermosetting plastic																
	Thermoplastic resin																

Recommended tap:  : Most suitable tap
 : Suitable tap

Recommended tapping fluid:  : Insoluble
 : Water-soluble

Machining/Fully synchronized feed only, in high-speed tapping area

	SU2-SP	Z-PRO MHSP	ZEN-B	ZET-B	F-SP	LS-F-SP	HDISP	HDASP	HFIHS	HFISP	HFAHS	HFASP
	HSS OX	HSS-Co Coating	HSS-P OX	HSS-P NI	HSS Coating	HSS Coating	HSS-Co Coating	HSS-Co Coating	HSS-Co Coating	HSS-Co Coating	HSS-Co Coating	HSS-Co Coating
	For hard-to-machine stainless steel	For middle hardness carbon steel	For nickel base alloys	For titanium alloys	For high-speed	Long, for high-speed	Dry tapping, for ultra high-speed For steel	For dry tapping; For aluminum materials	For ultra high-speed For steel	For ultra high-speed For steel, low spiral	For ultra high-speed For aluminum materials	For ultra high-speed For aluminum materials, low spiral
												
												
	①-132	①-48	①-178	①-170	①-196	①-200	①-220	①-224	①-204	①-208	①-212	①-216
			①-178	①-170								

Spiral Fluted Taps
(for blind hole) ①

Spiral Fluted Taps
(for through hole) ②

Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

S

Z-PRO
VUSP

Z-PRO
Coated Spiral Fluted Taps



Specification



Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 10~20 (m/min)	Medium carbon steels 中炭素鋼 10~30 (m/min)	High carbon steels 高炭素鋼 10~30 (m/min)	Alloy steels 合金鋼 10~20 (m/min)	Stainless steels ステンレス鋼 3~10 (m/min)	Tool steels 工具鋼 5~10 (m/min)	Ductile cast irons 強靱鑄鉄 10~30 (m/min)
Wrought aluminum アルミ圧延材 10~30 (m/min)	Aluminum alloy castings アルミ合金鑄物 10~35 (m/min)					

*For long shank type, the recommended cutting speed is 30% less than the above.

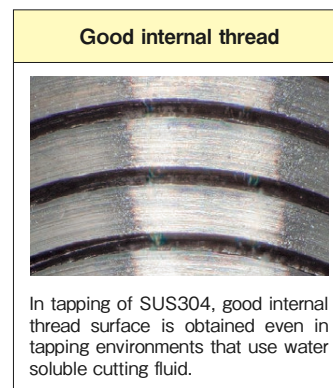
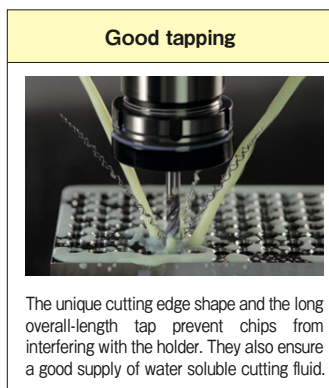
Product Features

- Durability is improved by premium powder HSS and special coating.
- Chip ejection efficiency is improved and cutting resistance is reduced by the unique cutting edge shape, achieving a good internal thread and long tool life.
- Proper tool projection length is secured, preventing chips from interfering with the holder.
- This is most suitable for tapping with water soluble cutting fluid.

Tapping Data

Tapping conditions [M8×1.25]

Work Material	SUS304
Tapping Length	16mm
Tapping Speed	10m/min
Machine	Machining center, vertical type
Tapping Fluid	Water soluble cutting fluid

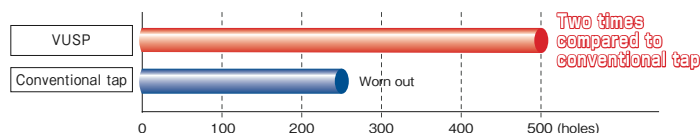


Tapping conditions [M3×0.5]

Work Material	S50C
Tapping Length	4.5mm
Tapping Speed	20m/min
Machine	Machining center, vertical type
Tapping Fluid	Water soluble cutting fluid



Close-up of VUSP
after Tapping of 250 Holes



●Compatible with a wide range of work materials

This is compatible with a wide range of steel work materials including general structural steel, carbon steel, and alloy steel.

JIS

①-5

Think threads with
YAMAWA

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

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

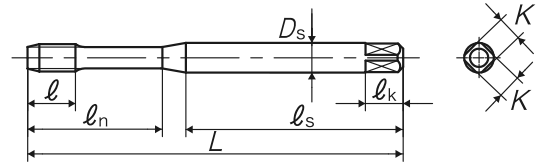
Precision Machinery/
Medical Surgical Instruments

⑫

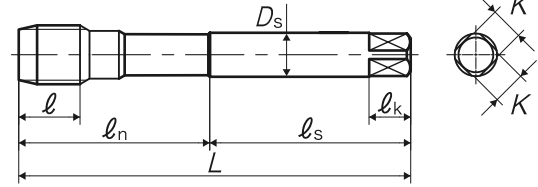
JIS

①-6

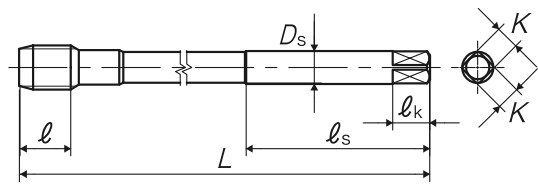
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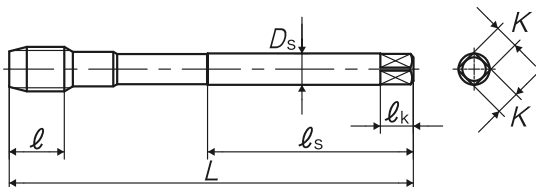
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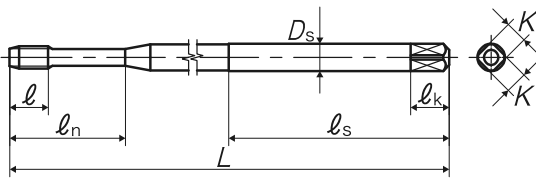
TYPE: 5



TYPE: 2



TYPE: 4



Oversize

Segment : 1D

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M3 × 0.5	P2	1101101035	C (2.5P)	56	5	18	32	4	3.2	6	3	1	¥ 3,050
M3 × 0.5	P3	1101201035	C (2.5P)	56	5	18	32	4	3.2	6	3	1	¥ 3,050
M3 × 0.5	P4	1101301035	C (2.5P)	56	5	18	32	4	3.2	6	3	1	¥ 3,050 ※
M3 × 0.35	P2	1101101036	C (2.5P)	56	5	18	32	4	3.2	6	3	1	¥ 4,280
M3 × 0.35	P3	1101201036	C (2.5P)	56	5	18	32	4	3.2	6	3	1	¥ 4,280 ※
M3 × 0.35	P4	1101301036	C (2.5P)	56	5	18	32	4	3.2	6	3	1	¥ 4,280 ※
M4 × 0.7	P2	1101101042	C (2.5P)	63	7	21	36	5	4	7	3	1	¥ 3,000
M4 × 0.7	P3	1101201042	C (2.5P)	63	7	21	36	5	4	7	3	1	¥ 3,000
M4 × 0.7	P4	1101301042	C (2.5P)	63	7	21	36	5	4	7	3	1	¥ 3,000 ※
M4 × 0.5	P2	1101101043	C (2.5P)	63	5	21	36	5	4	7	3	1	¥ 3,740
M4 × 0.5	P3	1101201043	C (2.5P)	63	5	21	36	5	4	7	3	1	¥ 3,740 ※
M4 × 0.5	P4	1101301043	C (2.5P)	63	5	21	36	5	4	7	3	1	¥ 3,740 ※
M5 × 0.8	P2	1101101049	C (2.5P)	70	9	25	40	5.5	4.5	7	3	1	¥ 3,030
M5 × 0.8	P3	1101201049	C (2.5P)	70	9	25	40	5.5	4.5	7	3	1	¥ 3,030
M5 × 0.8	P4	1101301049	C (2.5P)	70	9	25	40	5.5	4.5	7	3	1	¥ 3,030 ※
M5 × 0.5	P2	1101101051	C (2.5P)	70	6	25	40	5.5	4.5	7	3	1	¥ 3,880
M5 × 0.5	P3	1101201051	C (2.5P)	70	6	25	40	5.5	4.5	7	3	1	¥ 3,880 ※
M5 × 0.5	P4	1101301051	C (2.5P)	70	6	25	40	5.5	4.5	7	3	1	¥ 3,880 ※
M6 × 1	P2	1101101055	C (2.5P)	80	11	30	45	6	4.5	7	3	1	¥ 3,340
M6 × 1	P3	1101201055	C (2.5P)	80	11	30	45	6	4.5	7	3	1	¥ 3,340
M6 × 1	P4	1101301055	C (2.5P)	80	11	30	45	6	4.5	7	3	1	¥ 3,340 ※
M6 × 0.75	P2	1101101056	C (2.5P)	80	8	30	45	6	4.5	7	3	1	¥ 4,400
M6 × 0.75	P3	1101201056	C (2.5P)	80	8	30	45	6	4.5	7	3	1	¥ 4,400 ※
M6 × 0.75	P4	1101301056	C (2.5P)	80	8	30	45	6	4.5	7	3	1	¥ 4,400 ※
M6 × 0.5	P2	1101101057	C (2.5P)	80	8	30	45	6	4.5	7	3	1	¥ 4,400
M6 × 0.5	P3	1101201057	C (2.5P)	80	8	30	45	6	4.5	7	3	1	¥ 4,400 ※
M6 × 0.5	P4	1101301057	C (2.5P)	80	8	30	45	6	4.5	7	3	1	¥ 4,400 ※

※ = Specified Distribution Items. Made to order products.

 Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

JIS

VUSP Z-PRO Coated 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	MSRP
M8 × 1.25	P3	1101101064	C (2.5P)	90	12	-	46	6.2	5	8	3	2	¥ 4,400
M8 × 1.25	P4	1101201064	C (2.5P)	90	12	-	46	6.2	5	8	3	2	¥ 4,400
M8 × 1.25	P5	1101301064	C (2.5P)	90	12	-	46	6.2	5	8	3	2	¥ 4,400 ※
M8 × 1	P3	1101101065	C (2.5P)	90	12	-	46	6.2	5	8	3	2	¥ 5,200
M8 × 1	P4	1101201065	C (2.5P)	90	12	-	46	6.2	5	8	3	2	¥ 5,200 ※
M8 × 1	P5	1101301065	C (2.5P)	90	12	-	46	6.2	5	8	3	2	¥ 5,200 ※
M10 × 1.5	P3	1101101078	C (2.5P)	100	13	-	51	7	5.5	8	3	2	¥ 5,560
M10 × 1.5	P4	1101201078	C (2.5P)	100	13	-	51	7	5.5	8	3	2	¥ 5,560
M10 × 1.5	P5	1101301078	C (2.5P)	100	13	-	51	7	5.5	8	3	2	¥ 5,560 ※
M10 × 1.25	P3	1101101079	C (2.5P)	100	13	-	51	7	5.5	8	3	2	¥ 5,560
M10 × 1.25	P4	1101201079	C (2.5P)	100	13	-	51	7	5.5	8	3	2	¥ 5,560
M10 × 1.25	P5	1101301079	C (2.5P)	100	13	-	51	7	5.5	8	3	2	¥ 5,560 ※
M10 × 1	P3	1101101080	C (2.5P)	100	13	-	51	7	5.5	8	3	2	¥ 6,600
M10 × 1	P4	1101201080	C (2.5P)	100	13	-	51	7	5.5	8	3	2	¥ 6,600 ※
M10 × 1	P5	1101301080	C (2.5P)	100	13	-	51	7	5.5	8	3	2	¥ 6,600 ※
M12 × 1.75	P4	1101101088	C (2.5P)	110	15	-	56	8.5	6.5	9	3	2	¥ 7,250
M12 × 1.75	P5	1101201088	C (2.5P)	110	15	-	56	8.5	6.5	9	3	2	¥ 7,250
M12 × 1.75	P6	1101301088	C (2.5P)	110	15	-	56	8.5	6.5	9	3	2	¥ 7,250 ※
M12 × 1.5	P3	1101101089	C (2.5P)	110	15	-	56	8.5	6.5	9	3	2	¥ 7,250
M12 × 1.5	P4	1101201089	C (2.5P)	110	15	-	56	8.5	6.5	9	3	2	¥ 7,250
M12 × 1.5	P5	1101301089	C (2.5P)	110	15	-	56	8.5	6.5	9	3	2	¥ 7,250 ※
M12 × 1.25	P3	1101101090	C (2.5P)	110	15	-	56	8.5	6.5	9	3	2	¥ 7,250
M12 × 1.25	P4	1101201090	C (2.5P)	110	15	-	56	8.5	6.5	9	3	2	¥ 7,250
M12 × 1.25	P5	1101301090	C (2.5P)	110	15	-	56	8.5	6.5	9	3	2	¥ 7,250 ※
M14 × 2	P4	1101101100	C (2.5P)	110	18	-	56	10.5	8	11	3	2	¥ 9,930
M14 × 2	P5	1101201100	C (2.5P)	110	18	-	56	10.5	8	11	3	2	¥ 9,930
M14 × 2	P6	1101301100	C (2.5P)	110	18	-	56	10.5	8	11	3	2	¥ 9,930 ※
M14 × 1.5	P3	1101101102	C (2.5P)	110	14	-	56	10.5	8	11	3	2	¥ 9,930
M14 × 1.5	P4	1101201102	C (2.5P)	110	14	-	56	10.5	8	11	3	2	¥ 9,930
M14 × 1.5	P5	1101301102	C (2.5P)	110	14	-	56	10.5	8	11	3	2	¥ 9,930 ※
M16 × 2	P4	1101101114	C (2.5P)	110	18	-	56	12.5	10	13	3	2	¥ 13,000
M16 × 2	P5	1101201114	C (2.5P)	110	18	-	56	12.5	10	13	3	2	¥ 13,000
M16 × 2	P6	1101301114	C (2.5P)	110	18	-	56	12.5	10	13	3	2	¥ 13,000 ※
M16 × 1.5	P3	1101101116	C (2.5P)	110	14	-	56	12.5	10	13	3	2	¥ 13,000
M16 × 1.5	P4	1101201116	C (2.5P)	110	14	-	56	12.5	10	13	3	2	¥ 13,000
M16 × 1.5	P5	1101301116	C (2.5P)	110	14	-	56	12.5	10	13	3	2	¥ 13,000 ※
M18 × 2.5	P5	1101101128	C (2.5P)	125	20	-	64	14	11	14	4	2	¥ 16,300
M18 × 1.5	P4	1101101130	C (2.5P)	125	14	-	64	14	11	14	3	2	¥ 16,300
M20 × 2.5	P5	1101101141	C (2.5P)	140	20	-	71	15	12	15	4	3	¥ 23,600
M20 × 1.5	P4	1101101144	C (2.5P)	140	14	-	71	15	12	15	3	3	¥ 23,600
M22 × 2.5	P5	1101101156	C (2.5P)	140	20	-	71	17	13	16	4	3	¥ 28,400
M22 × 1.5	P4	1101101158	C (2.5P)	140	14	-	71	17	13	16	3	3	¥ 28,400
M24 × 3	P5	1101101167	C (2.5P)	160	25	-	82	19	15	18	4	3	¥ 34,600
M24 × 1.5	P4	1101101170	C (2.5P)	160	18	-	82	19	15	18	3	3	¥ 34,600
Long shank, for Metric Threads													
M3 × 0.5	P2	2101101035	C (2.5P)	100	5	18	32	4	3.2	6	3	4	¥ 5,530
M3 × 0.35	P2	2101101036	C (2.5P)	100	5	18	32	4	3.2	6	3	4	¥ 7,740 ※
M4 × 0.7	P2	2101101042	C (2.5P)	100	7	21	36	5	4	7	3	4	¥ 5,040
M4 × 0.5	P2	2101101043	C (2.5P)	100	5	21	36	5	4	7	3	4	¥ 6,560 ※
M5 × 0.8	P2	2101101049	C (2.5P)	100	9	25	40	5.5	4.5	7	3	4	¥ 4,530

JIS

①-7

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

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

VUSP Z-PRO Coated 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	MSRP
M5 × 0.5	P2	2101101051	C (2.5P)	100	6	25	40	5.5	4.5	7	3	4	¥ 5,660 ※
M6 × 1	P2	2101101055	C (2.5P)	100	11	30	45	6	4.5	7	3	4	¥ 4,640
M6 × 0.75	P2	2101101056	C (2.5P)	100	8	30	45	6	4.5	7	3	4	¥ 5,800
M6 × 0.5	P2	2101101057	C (2.5P)	100	8	30	45	6	4.5	7	3	4	¥ 5,800 ※
M8 × 1.25	P3	2101101064	C (2.5P)	150	12	-	46	6.2	5	8	3	5	¥ 7,980
M8 × 1	P3	2101101065	C (2.5P)	150	12	-	46	6.2	5	8	3	5	¥ 9,180
M10 × 1.5	P3	2101101078	C (2.5P)	150	13	-	51	7	5.5	8	3	5	¥ 9,340
M10 × 1.25	P3	2101101079	C (2.5P)	150	13	-	51	7	5.5	8	3	5	¥ 9,340
M10 × 1	P3	2101101080	C (2.5P)	150	13	-	51	7	5.5	8	3	5	¥ 10,900
M12 × 1.75	P4	2101101088	C (2.5P)	150	15	-	56	8.5	6.5	9	3	5	¥ 11,200
M12 × 1.5	P3	2101101089	C (2.5P)	150	15	-	56	8.5	6.5	9	3	5	¥ 11,200
M12 × 1.25	P3	2101101090	C (2.5P)	150	15	-	56	8.5	6.5	9	3	5	¥ 11,200
M14 × 2	P4	2101101100	C (2.5P)	150	18	-	56	10.5	8	11	3	5	¥ 15,000
M14 × 1.5	P3	2101101102	C (2.5P)	150	14	-	56	10.5	8	11	3	5	¥ 15,000
M16 × 2	P4	2101101114	C (2.5P)	150	18	-	56	12.5	10	13	3	5	¥ 15,700
M16 × 1.5	P3	2101101116	C (2.5P)	150	14	-	56	12.5	10	13	3	5	¥ 15,700

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-8

① Spiral Fluted Tap Series for blind hole

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

ANSI

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

Z-PRO
VUSP

Z-PRO
Coated Spiral Fluted Taps



Specification

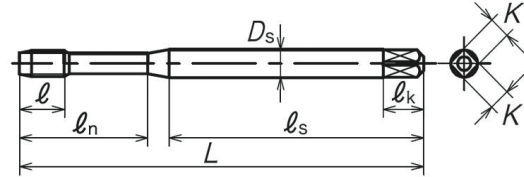


- Durability is improved by premium powder HSS and special coating.
- Chip ejection efficiency is improved and cutting resistance is reduced by the unique cutting edge shape, achieving a good internal thread and long tool life.

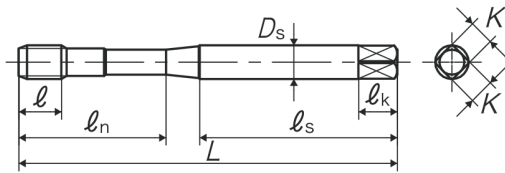
Tapping Speeds depending on Materials

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	Stainless steels ステンレス鋼	Tool steels 工具鋼	Ductile cast irons 強靱鑄鉄
10~20 (m/min)	10~30 (m/min)	10~30 (m/min)	10~20 (m/min)	3~10 (m/min)	5~10 (m/min)	10~30 (m/min)
Wrought aluminum アルミ圧延材	Aluminum alloy castings アルミ合金鑄物					
10~30 (m/min)	10~35 (m/min)					

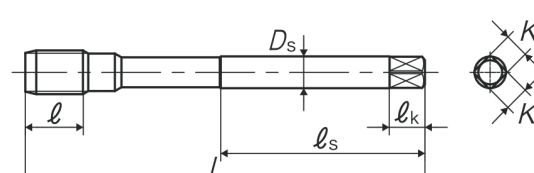
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1D

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	ℓ_s (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	D4	5101101035	2.5P	2.205	0.197	0.736	1.339	0.141	0.110	0.187	3	1
M3 × 0.35	D4	5101101036	2.5P	2.205	0.197	0.736	1.339	0.141	0.110	0.187	3	1
M4 × 0.7	D5	5101101042	2.5P	2.480	0.276	0.815	1.535	0.168	0.131	0.25	3	1
M4 × 0.5	D4	5101101043	2.5P	2.480	0.197	0.815	1.535	0.168	0.131	0.25	3	1
M5 × 0.8	D5	5101101049	2.5P	2.756	0.354	0.984	1.654	0.194	0.152	0.25	3	1
M5 × 0.5	D4	5101101051	2.5P	2.756	0.236	0.984	1.654	0.194	0.152	0.25	3	1
M6 × 1	D6	5101101055	2.5P	3.150	0.433	1.181	1.713	0.255	0.191	0.312	3	1
M6 × 0.75	D6	5101101056	2.5P	3.150	0.315	1.181	1.713	0.255	0.191	0.312	3	1
M6 × 0.5	D4	5101101057	2.5P	3.150	0.315	1.181	1.713	0.255	0.191	0.312	3	1
M8 × 1.25	D7	5101101064	2.5P	3.543	0.472	1.378	1.831	0.318	0.238	0.375	3	2
M8 × 1	D6	5101101065	2.5P	3.543	0.472	1.378	1.831	0.318	0.238	0.375	3	2
M10 × 1.5	D8	5101101078	2.5P	3.937	0.512	1.535	2.126	0.381	0.286	0.437	3	2
M10 × 1.25	D6	5101101079	2.5P	3.937	0.512	1.535	2.126	0.381	0.286	0.437	3	2
M10 × 1	D6	5101101080	2.5P	3.937	0.512	1.535	2.126	0.381	0.286	0.437	3	2
M12 × 1.75	D8	5101101088	2.5P	4.331	0.591	-	2.205	0.367	0.275	0.437	3	3
M12 × 1.5	D7	5101101089	2.5P	4.331	0.591	-	2.205	0.367	0.275	0.437	3	3

ANSI

①-9

Think threads with
YAMAWA

・ This product is different from JIS products in shape and dimensions, please be careful when using.

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

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M12 × 1.25	D7	5101101090	2.5P	4.331	0.591	-	2.205	0.367	0.275	0.437	3	3
M14 × 2	D9	5101101100	2.5P	4.331	0.709	-	2.205	0.429	0.322	0.5	3	3
M14 × 1.5	D8	5101101102	2.5P	4.331	0.551	-	2.205	0.429	0.322	0.5	3	3
M16 × 2	D9	5101101114	2.5P	4.331	0.709	-	2.205	0.480	0.360	0.562	3	3
M16 × 1.5	D8	5101101116	2.5P	4.331	0.551	-	2.205	0.480	0.360	0.562	3	3
M18 × 2.5	D9	5101101128	2.5P	4.921	0.787	-	2.520	0.542	0.406	0.625	4	3
M18 × 1.5	D8	5101101130	2.5P	4.921	0.551	-	2.520	0.542	0.406	0.625	3	3
M20 × 2.5	D9	5101101141	2.5P	5.512	0.787	-	2.795	0.652	0.489	0.687	4	3
M20 × 1.5	D8	5101101144	2.5P	5.512	0.551	-	2.795	0.652	0.489	0.687	3	3
M22 × 2.5	D9	5101101156	2.5P	5.512	0.787	-	2.795	0.697	0.523	0.75	4	3
M22 × 1.5	D8	5101101158	2.5P	5.512	0.551	-	2.795	0.697	0.523	0.75	3	3
M24 × 3	D10	5101101167	2.5P	6.299	0.984	-	3.228	0.760	0.570	0.75	4	3
M24 × 1.5	D8	5101101170	2.5P	6.299	0.709	-	3.228	0.760	0.570	0.75	3	3
For Unified Threads												
No.5-40UNC	GH2	5101103021	2.5P	2.205	0.197	0.736	1.339	0.141	0.110	0.187	2	1
No.5-44UNF	GH2	5101103022	2.5P	2.205	0.197	0.736	1.339	0.141	0.110	0.187	2	1
No.6-32UNC	GH2	5101103023	2.5P	2.205	0.276	0.748	1.339	0.141	0.110	0.187	2	1
No.6-40UNF	GH2	5101103024	2.5P	2.205	0.276	0.748	1.339	0.141	0.110	0.187	2	1
No.8-32UNC	GH3	5101103029	2.5P	2.480	0.276	0.827	1.535	0.168	0.131	0.25	2	1
No.8-36UNF	GH3	5101103030	2.5P	2.480	0.276	0.827	1.535	0.168	0.131	0.25	2	1
No.10-24UNC	GH3	5101103039	2.5P	2.756	0.354	0.945	1.654	0.194	0.152	0.25	2	1
No.10-32UNF	GH3	5101103041	2.5P	2.756	0.354	0.945	1.654	0.194	0.152	0.25	2	1
No.12-24UNC	GH3	5101103047	2.5P	3.150	0.354	0.984	1.953	0.220	0.165	0.281	2	1
No.12-28UNF	GH3	5101103048	2.5P	3.150	0.354	0.984	1.953	0.220	0.165	0.281	2	1
1/4-20UNC	GH3	5101103058	2.5P	3.150	0.433	1.181	1.713	0.255	0.191	0.312	2	1
1/4-20UNC	GH5	5101303058	2.5P	3.150	0.433	1.181	1.713	0.255	0.191	0.312	2	1
1/4-28UNF	GH3	5101103062	2.5P	3.150	0.433	1.181	1.713	0.255	0.191	0.312	2	1
1/4-28UNF	GH5	5101303062	2.5P	3.150	0.433	1.181	1.713	0.255	0.191	0.312	2	1
5/16-18UNC	GH5	5101103071	2.5P	3.543	0.472	1.378	1.831	0.318	0.238	0.375	3	2
3/8-16UNC	GH5	5101103082	2.5P	3.937	0.512	1.535	2.028	0.381	0.286	0.437	3	2
7/16-14UNC	GH5	5101103098	2.5P	3.937	0.512	-	2.008	0.323	0.242	0.406	3	3
1/2-13UNC	GH5	5101103111	2.5P	4.331	0.591	-	2.205	0.367	0.275	0.437	3	3
9/16-12UNC	GH5	5101103126	2.5P	4.331	0.709	-	2.205	0.429	0.322	0.5	3	3
5/8-11UNC	GH5	5101103138	2.5P	4.331	0.709	-	2.205	0.480	0.360	0.562	3	3

1

ANSI

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

ANSI

①-10

 Think threads with
YAMAWA

• This product is different from JIS products in shape and dimensions, please be careful when using.

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

Dies

⑩

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

Z-PRO
VUSP

Z-PRO
Coated Spiral Fluted Taps



Specification

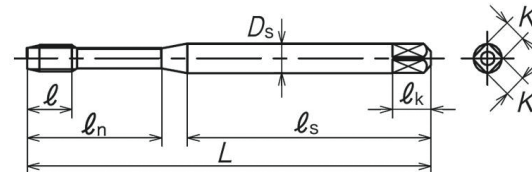


- Durability is improved by premium powder HSS and special coating.
- Chip ejection efficiency is improved and cutting resistance is reduced by the unique cutting edge shape, achieving a good internal thread and long tool life.

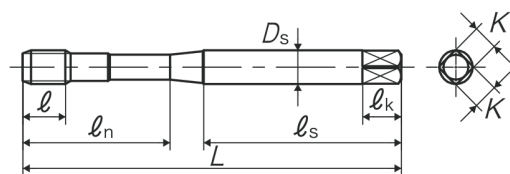
Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 10~20 (m/min)	Medium carbon steels 中炭素鋼 10~30 (m/min)	High carbon steels 高炭素鋼 10~30 (m/min)	Alloy steels 合金鋼 10~20 (m/min)	Stainless steels ステンレス鋼 3~10 (m/min)	Tool steels 工具鋼 5~10 (m/min)	Ductile cast irons 強靱鑄鉄 10~30 (m/min)
Wrought aluminum アルミ圧延材 10~30 (m/min)	Aluminum alloy castings アルミ合金鑄物 10~35 (m/min)					

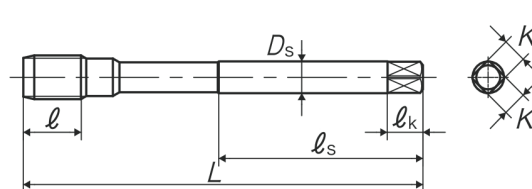
TYPE: 1



TYPE: 2



TYPE: 3



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
For Metric Threads												
M2 × 0.4	ISO2X	3101101021	2.5P	45	4	10	32	2.8	2.1	5	2	1
M2.2 × 0.45	ISO2X	3101101024	2.5P	45	4	11	32	2.8	2.1	5	2	1
M2.3 × 0.4	ISO2X	3101101026	2.5P	45	4	11	32	2.8	2.1	5	2	1
M2.5 × 0.45	ISO2X	3101101029	2.5P	50	4	15	33	2.8	2.1	5	2	1
M2.6 × 0.45	ISO2X	3101101032	2.5P	50	4	15	33	2.8	2.1	5	2	1
M3 × 0.5	ISO2X	3101101035	2.5P	56	5	18	34	3.5	2.7	6	3	1
M3 × 0.5	ISO3X	3101201035	2.5P	56	5	18	34	3.5	2.7	6	3	1
M3 × 0.5	7GX	3101301035	2.5P	56	5	18	34	3.5	2.7	6	3	1
M3 × 0.5	ISO2X+100	3101501035	2.5P	56	5	18	34	3.5	2.7	6	3	1
M3 × 0.35	ISO2X	3101101036	2.5P	56	5	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2X	3101101042	2.5P	63	7	21	38	4.5	3.4	6	3	1
M4 × 0.7	ISO3X	3101201042	2.5P	63	7	21	38	4.5	3.4	6	3	1
M4 × 0.7	7GX	3101301042	2.5P	63	7	21	38	4.5	3.4	6	3	1
M4 × 0.7	ISO2X+100	3101501042	2.5P	63	7	21	38	4.5	3.4	6	3	1
M4 × 0.5	ISO2X	3101101043	2.5P	63	5	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2X	3101101049	2.5P	70	9	25	39	6	4.9	8	3	1

Think threads with
YAMAWA

・ This product is different from JIS products in shape and dimensions, please be careful when using.

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

1

DIN

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

DIN

①-12

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M5 × 0.8	ISO3X	3101201049	2.5P	70	9	25	39	6	4.9	8	3	1
M5 × 0.8	7GX	3101301049	2.5P	70	9	25	39	6	4.9	8	3	1
M5 × 0.8	ISO2X+100	3101501049	2.5P	70	9	25	39	6	4.9	8	3	1
M5 × 0.5	ISO2X	3101101051	2.5P	70	6	25	39	6	4.9	8	3	1
M6 × 1	ISO2X	3101101055	2.5P	80	11	30	45	6	4.9	8	3	1
M6 × 1	ISO3X	3101201055	2.5P	80	11	30	45	6	4.9	8	3	1
M6 × 1	7GX	3101301055	2.5P	80	11	30	45	6	4.9	8	3	1
M6 × 1	ISO2X+100	3101501055	2.5P	80	11	30	45	6	4.9	8	3	1
M6 × 0.75	ISO2X	3101101056	2.5P	80	8	30	45	6	4.9	8	3	1
M6 × 0.5	ISO2X	3101101057	2.5P	80	8	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	3101101064	2.5P	90	12	35	47	8	6.2	9	3	2
M8 × 1.25	ISO3X	3101201064	2.5P	90	12	35	47	8	6.2	9	3	2
M8 × 1.25	7GX	3101301064	2.5P	90	12	35	47	8	6.2	9	3	2
M8 × 1.25	ISO2X+100	3101501064	2.5P	90	12	35	47	8	6.2	9	3	2
M8 × 1	ISO2X	3101101065	2.5P	90	12	-	46	6	4.9	8	3	3
M10 × 1.5	ISO2X	3101101078	2.5P	100	13	39	52	10	8	11	3	2
M10 × 1.5	ISO3X	3101201078	2.5P	100	13	39	52	10	8	11	3	2
M10 × 1.5	7GX	3101301078	2.5P	100	13	39	52	10	8	11	3	2
M10 × 1.5	ISO2X+100	3101501078	2.5P	100	13	39	52	10	8	11	3	2
M10 × 1.25	ISO2X	3101101079	2.5P	100	13	-	51	7	5.5	8	3	3
M10 × 1	ISO2X	3101101080	2.5P	90	13	-	46	7	5.5	8	3	3
M12 × 1.75	ISO2X	3101101088	2.5P	110	15	-	56	9	7	10	3	3
M12 × 1.75	ISO3X	3101201088	2.5P	110	15	-	56	9	7	10	3	3
M12 × 1.75	7GX	3101301088	2.5P	110	15	-	56	9	7	10	3	3
M12 × 1.75	ISO2X+100	3101501088	2.5P	110	15	-	56	9	7	10	3	3
M12 × 1.5	ISO2X	3101101089	2.5P	100	15	-	51	9	7	10	3	3
M12 × 1.25	ISO2X	3101101090	2.5P	100	15	-	51	9	7	10	3	3
M14 × 2	ISO2X	3101101100	2.5P	110	18	-	56	11	9	12	3	3
M14 × 2	ISO3X	3101201100	2.5P	110	18	-	56	11	9	12	3	3
M14 × 2	7GX	3101301100	2.5P	110	18	-	56	11	9	12	3	3
M14 × 2	ISO2X+100	3101501100	2.5P	110	18	-	56	11	9	12	3	3
M14 × 1.5	ISO2X	3101101102	2.5P	100	14	-	51	11	9	12	3	3
M16 × 2	ISO2X	3101101114	2.5P	110	18	-	56	12	9	12	3	3
M16 × 2	ISO3X	3101201114	2.5P	110	18	-	56	12	9	12	3	3
M16 × 2	7GX	3101301114	2.5P	110	18	-	56	12	9	12	3	3
M16 × 2	ISO2X+100	3101501114	2.5P	110	18	-	56	12	9	12	3	3
M16 × 1.5	ISO2X	3101101116	2.5P	100	14	-	51	12	9	12	3	3
M18 × 2.5	ISO2X	3101101128	2.5P	125	20	-	64	14	11	14	4	3
M18 × 1.5	ISO2X	3101101130	2.5P	110	14	-	56	14	11	14	3	3
M20 × 2.5	ISO2X	3101101141	2.5P	140	20	-	71	16	12	15	4	3
M20 × 1.5	ISO2X	3101101144	2.5P	125	14	-	64	16	12	15	3	3
M22 × 2.5	ISO2X	3101101156	2.5P	140	20	-	71	18	14.5	17	4	3
M22 × 1.5	ISO2X	3101101158	2.5P	125	14	-	64	18	14.5	17	3	3
M24 × 3	ISO2X	3101101167	2.5P	160	25	-	82	18	14.5	17	4	3
M24 × 1.5	ISO2X	3101101170	2.5P	140	18	-	71	18	14.5	17	3	3
For Unified Threads												
No.5-40UNC	2BX	3101103021	2.5P	56	5	18	34	3.5	2.7	6	2	1
No.5-44UNF	2BX	3101103022	2.5P	56	5	18	34	3.5	2.7	6	2	1
No.6-32UNC	2BX	3101103023	2.5P	56	7	19	32	4	3	6	2	1
No.6-40UNF	2BX	3101103024	2.5P	56	7	19	32	4	3	6	2	1

· This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

DIN

VUSP Z-PRO Coated 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
No.8-32UNC	2BX	3101103029	2.5P	63	7	21	38	4.5	3.4	6	2	1
No.8-36UNF	2BX	3101103030	2.5P	63	7	21	38	4.5	3.4	6	2	1
No.10-24UNC	2BX	3101103039	2.5P	70	9	24	39	6	4.9	8	2	1
No.10-32UNF	2BX	3101103041	2.5P	70	9	24	39	6	4.9	8	2	1
No.12-24UNC	2BX	3101103047	2.5P	80	9	28	45	6	4.9	8	2	1
No.12-28UNF	2BX	3101103048	2.5P	80	9	28	45	6	4.9	8	2	1
1/4-20UNC	2BX	3101103058	2.5P	80	11	30	42	7	5.5	8	2	1
1/4-28UNF	2BX	3101103062	2.5P	80	11	30	42	7	5.5	8	2	1
5/16-18UNC	2BX	3101103071	2.5P	90	12	35	47	8	6.2	9	3	2
3/8-16UNC	2BX	3101103082	2.5P	100	13	39	54	9	7	10	3	2
7/16-14UNC	2BX	3101103098	2.5P	100	13	-	51	8	6.2	9	3	3
1/2-13UNC	2BX	3101103111	2.5P	110	15	-	56	9	7	10	3	3
9/16-12UNC	2BX	3101103126	2.5P	110	18	-	56	11	9	12	3	3
5/8-11UNC	2BX	3101103138	2.5P	110	18	-	56	12	9	12	3	3

①

Spiral Fluted Taps
(for blind hole)

②

Spiral Fluted Taps
(for through hole)

③

Spiral Pointed Taps
(for through hole)

④

Hand Taps

⑤

Cemented
Carbide Taps

⑥

Roll Taps

⑦

Special Thread Taps
Simple Inspection Tools

⑧

Pipe Taps

⑨

Thread Mills
Premium Thread Mills

⑩

Dies

⑪

Center Drills
Centering Tools

⑫

Precision Machinery/
Medical Surgical Instruments

DIN

①-13

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

M E M O

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-15

S

Z-PRO

VUSP 1.5P

Z-PRO

Coated Spiral Fluted Taps 1.5P



Specification



Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 5~15 (m/min)	Medium carbon steels 中炭素鋼 5~15 (m/min)	High carbon steels 高炭素鋼 5~15 (m/min)	Alloy steels 合金鋼 5~15 (m/min)	Stainless steels ステンレス鋼 3~10 (m/min)	Tool steels 工具鋼 5~10 (m/min)	Ductile cast irons 強靱鑄鉄 5~15 (m/min)
Wrought aluminum アルミ圧延材 5~20 (m/min)	Aluminum alloy castings アルミ合金鑄物 5~20 (m/min)					

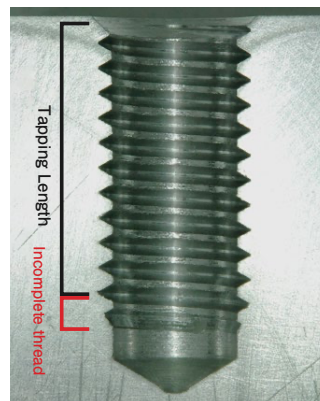
Product Features

- The chamfer length is 1.5 pitches, making it ideal for machining blind holes where there is little room between the bored hole depth and the full thread length.
- Durability is improved by premium powder HSS and special coating.
- Chip ejection efficiency is improved and cutting resistance is reduced by the unique cutting edge shape, achieving a good internal thread and long tool life.
- Proper tool projection length is secured, preventing chips from interfering with the holder.
- This is most suitable for tapping with water soluble cutting fluid.

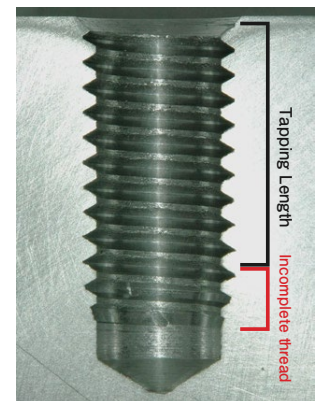
Tapping Data

Tapping condition [M6×1]

Work Material	S50C
Tapping Speed	15m/min
Machine	Machining center, vertical type
Tapping Fluid	Water soluble cutting fluid
Tapping Length	13mm, blind hole



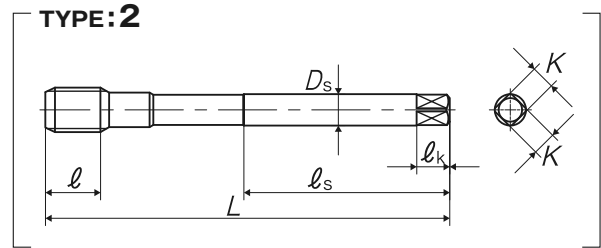
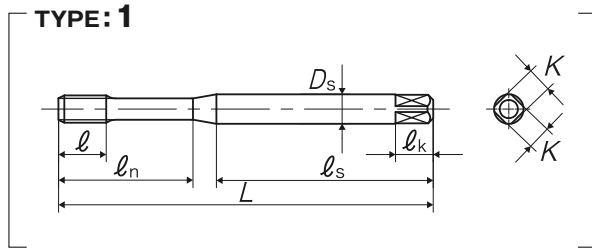
VUSP 1.5P
Internal thread surface



VUSP (Chamfer 2.5P)
Internal thread surface

Think threads with
YAMAWA

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



Segment : 1D

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M3 × 0.5	P2	1103101035	1.5P	56	5	18	32	4	3.2	6	3	1	¥ 3,050
M3 × 0.35	P2	1103101036	1.5P	56	5	18	32	4	3.2	6	3	1	¥ 4,280 ※
M4 × 0.7	P2	1103101042	1.5P	63	7	21	36	5	4	7	3	1	¥ 3,000
M4 × 0.5	P2	1103101043	1.5P	63	5	21	36	5	4	7	3	1	¥ 3,740 ※
M5 × 0.8	P2	1103101049	1.5P	70	9	25	40	5.5	4.5	7	3	1	¥ 3,030
M5 × 0.5	P2	1103101051	1.5P	70	6	25	40	5.5	4.5	7	3	1	¥ 3,880 ※
M6 × 1	P2	1103101055	1.5P	80	11	30	45	6	4.5	7	3	1	¥ 3,340
M6 × 0.75	P2	1103101056	1.5P	80	8	30	45	6	4.5	7	3	1	¥ 4,400 ※
M6 × 0.5	P2	1103101057	1.5P	80	8	30	45	6	4.5	7	3	1	¥ 4,400 ※
M8 × 1.25	P3	1103101064	1.5P	90	12	-	46	6.2	5	8	3	2	¥ 4,400
M8 × 1	P3	1103101065	1.5P	90	12	-	46	6.2	5	8	3	2	¥ 5,200 ※
M10 × 1.5	P3	1103101078	1.5P	100	13	-	51	7	5.5	8	3	2	¥ 5,560
M10 × 1.25	P3	1103101079	1.5P	100	13	-	51	7	5.5	8	3	2	¥ 5,560
M10 × 1	P3	1103101080	1.5P	100	13	-	51	7	5.5	8	3	2	¥ 6,600 ※
M12 × 1.75	P4	1103101088	1.5P	110	15	-	56	8.5	6.5	9	3	2	¥ 7,250
M12 × 1.5	P3	1103101089	1.5P	110	15	-	56	8.5	6.5	9	3	2	¥ 7,250
M12 × 1.25	P3	1103101090	1.5P	110	15	-	56	8.5	6.5	9	3	2	¥ 7,250
M14 × 2	P4	1103101100	1.5P	110	18	-	56	10.5	8	11	3	2	¥ 9,930
M14 × 1.5	P3	1103101102	1.5P	110	14	-	56	10.5	8	11	3	2	¥ 9,930
M16 × 2	P4	1103101114	1.5P	110	18	-	56	12.5	10	13	3	2	¥ 13,000
M16 × 1.5	P3	1103101116	1.5P	110	14	-	56	12.5	10	13	3	2	¥ 13,000

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

1

JIS

Spiral Fluted Taps
(for blind hole) ①

Spiral Fluted Taps
(for through hole) ②

Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫

JIS

①-16

① Spiral Fluted Tap Series for blind hole

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

ANSI

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

Dies

⑩

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

Z-PRO

VUSP 1.5P

Z-PRO

Coated Spiral Fluted Taps 1.5P



Specification



■ Lead length of 1.5P makes it ideal for blind hole drilling, in which there is no tolerance for prepared hole depth and effective thread length.

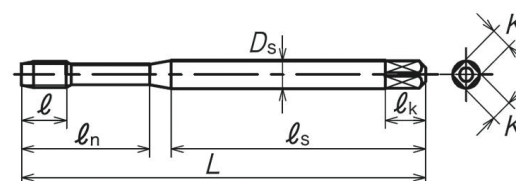
■ Durability is improved by premium powder HSS and special coating.

■ Chip ejection efficiency is improved and cutting resistance is reduced by the unique cutting edge shape, achieving a good internal thread and long tool life.

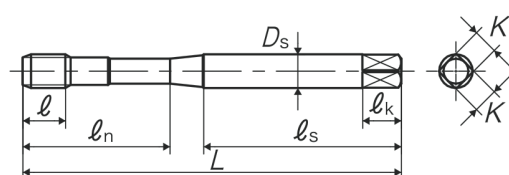
Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 5~15 (m/min)	Medium carbon steels 中炭素鋼 5~15 (m/min)	High carbon steels 高炭素鋼 5~15 (m/min)	Alloy steels 合金鋼 5~15 (m/min)	Stainless steels ステンレス鋼 3~10 (m/min)	Tool steels 工具鋼 5~10 (m/min)	Ductile cast irons 強靱鑄鉄 5~15 (m/min)
Wrought aluminum アルミ圧延材 5~20 (m/min)	Aluminum alloy castings アルミ合金鑄物 5~20 (m/min)					

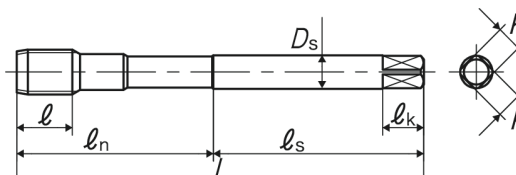
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1D

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	ℓ_s (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	D4	5103101035	1.5P	2.205	0.197	0.736	1.339	0.141	0.110	0.187	3	1
M3 × 0.35	D4	5103101036	1.5P	2.205	0.197	0.736	1.339	0.141	0.110	0.187	3	1
M4 × 0.7	D5	5103101042	1.5P	2.480	0.276	0.815	1.535	0.168	0.131	0.25	3	1
M4 × 0.5	D4	5103101043	1.5P	2.480	0.197	0.815	1.535	0.168	0.131	0.25	3	1
M5 × 0.8	D5	5103101049	1.5P	2.756	0.354	0.984	1.654	0.194	0.152	0.25	3	1
M5 × 0.5	D4	5103101051	1.5P	2.756	0.236	0.984	1.654	0.194	0.152	0.25	3	1
M6 × 1	D6	5103101055	1.5P	3.150	0.433	1.181	1.713	0.255	0.191	0.312	3	1
M6 × 0.75	D6	5103101056	1.5P	3.150	0.315	1.181	1.713	0.255	0.191	0.312	3	1
M6 × 0.5	D4	5103101057	1.5P	3.150	0.315	1.181	1.713	0.255	0.191	0.312	3	1
M8 × 1.25	D7	5103101064	1.5P	3.543	0.472	1.378	1.831	0.318	0.238	0.375	3	2
M8 × 1	D6	5103101065	1.5P	3.543	0.472	1.378	1.831	0.318	0.238	0.375	3	2
M10 × 1.5	D8	5103101078	1.5P	3.937	0.512	1.535	2.126	0.381	0.286	0.437	3	2
M10 × 1.25	D6	5103101079	1.5P	3.937	0.512	1.535	2.126	0.381	0.286	0.437	3	2
M10 × 1	D6	5103101080	1.5P	3.937	0.512	1.535	2.126	0.381	0.286	0.437	3	2
M12 × 1.75	D8	5103101088	1.5P	4.331	0.591	-	2.205	0.367	0.275	0.437	3	3
M12 × 1.5	D7	5103101089	1.5P	4.331	0.591	-	2.205	0.367	0.275	0.437	3	3

ANSI

①-17

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

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

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M12 × 1.25	D7	5103101090	1.5P	4.331	0.591	-	2.205	0.367	0.275	0.437	3	3
M14 × 2	D9	5103101100	1.5P	4.331	0.709	-	2.205	0.429	0.322	0.5	3	3
M14 × 1.5	D8	5103101102	1.5P	4.331	0.551	-	2.205	0.429	0.322	0.5	3	3
M16 × 2	D9	5103101114	1.5P	4.331	0.709	-	2.205	0.480	0.360	0.562	3	3
M16 × 1.5	D8	5103101116	1.5P	4.331	0.551	-	2.205	0.480	0.360	0.562	3	3

1

ANSI

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

ANSI

①-18

 Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

Z-PRO

VUSP E

Z-PRO

Coated Spiral Fluted Taps E(1.5P)



Specification

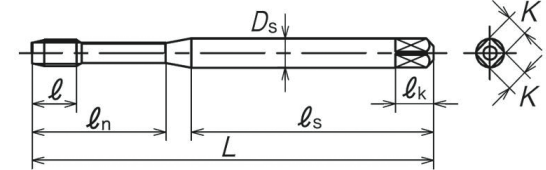


- Lead length of 1.5P makes it ideal for blind hole drilling, in which there is no tolerance for prepared hole depth and effective thread length.
- Durability is improved by premium powder HSS and special coating.
- Chip ejection efficiency is improved and cutting resistance is reduced by the unique cutting edge shape, achieving a good internal thread and long tool life.

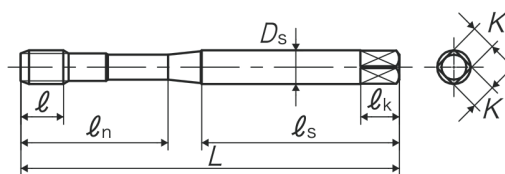
Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 5~15 (m/min)	Medium carbon steels 中炭素鋼 5~15 (m/min)	High carbon steels 高炭素鋼 5~15 (m/min)	Alloy steels 合金鋼 5~15 (m/min)	Stainless steels ステンレス鋼 3~10 (m/min)	Tool steels 工具鋼 5~10 (m/min)	Ductile cast irons 強靱鑄鉄 5~15 (m/min)
Wrought aluminum アルミ圧延材 5~20 (m/min)	Aluminum alloy castings アルミ合金鑄物 5~20 (m/min)					

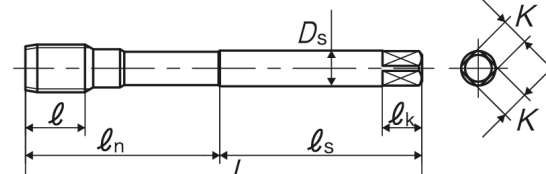
TYPE: 1



TYPE: 2



TYPE: 3



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
For Metric Threads												
M3 × 0.5	ISO2X	3103101035	E (1.5P)	56	5	18	34	3.5	2.7	6	3	1
M3 × 0.35	ISO2X	3103101036	E (1.5P)	56	5	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2X	3103101042	E (1.5P)	63	7	21	38	4.5	3.4	6	3	1
M4 × 0.5	ISO2X	3103101043	E (1.5P)	63	5	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2X	3103101049	E (1.5P)	70	9	25	39	6	4.9	8	3	1
M5 × 0.5	ISO2X	3103101051	E (1.5P)	70	6	25	39	6	4.9	8	3	1
M6 × 1	ISO2X	3103101055	E (1.5P)	80	11	30	45	6	4.9	8	3	1
M6 × 0.75	ISO2X	3103101056	E (1.5P)	80	8	30	45	6	4.9	8	3	1
M6 × 0.5	ISO2X	3103101057	E (1.5P)	80	8	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	3103101064	E (1.5P)	90	12	35	47	8	6.2	9	3	2
M8 × 1	ISO2X	3103101065	E (1.5P)	90	12	-	46	6	4.9	8	3	3
M10 × 1.5	ISO2X	3103101078	E (1.5P)	100	13	39	52	10	8	11	3	2
M10 × 1.25	ISO2X	3103101079	E (1.5P)	100	13	-	51	7	5.5	8	3	3
M10 × 1	ISO2X	3103101080	E (1.5P)	90	13	-	46	7	5.5	8	3	3
M12 × 1.75	ISO2X	3103101088	E (1.5P)	110	15	-	56	9	7	10	3	3
M12 × 1.5	ISO2X	3103101089	E (1.5P)	100	15	-	51	9	7	10	3	3

DIN

①-19

Think threads with
YAMAWA

This product is different from JIS products in shape and dimensions, please be careful when using.

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

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
M12 × 1.25	ISO2X	3103101090	E (1.5P)	100	15	-	51	9	7	10	3	3
M14 × 2	ISO2X	3103101100	E (1.5P)	110	18	-	56	11	9	12	3	3
M14 × 1.5	ISO2X	3103101102	E (1.5P)	100	14	-	51	11	9	12	3	3
M16 × 2	ISO2X	3103101114	E (1.5P)	110	18	-	56	12	9	12	3	3
M16 × 1.5	ISO2X	3103101116	E (1.5P)	100	14	-	51	12	9	12	3	3

1

DIN

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

DIN

①-20

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-21

S

Z-PRO

VUSP CH



Z-PRO

Coated Spiral Fluted Taps with Coolant Through Hole

Specification

HSS-P

Coating



Tapping Speeds depending on Materials

Low carbon steels
低炭素鋼
10~20
(m/min)

Medium carbon steels
中炭素鋼
10~30
(m/min)

High carbon steels
高炭素鋼
10~30
(m/min)

Alloy steels
合金鋼
10~20
(m/min)

Stainless steels
ステンレス鋼
3~10
(m/min)

Tool steels
工具鋼
5~10
(m/min)

Ductile cast irons
強靱鋳鉄
10~20
(m/min)

Wrought aluminum
アルミ圧延材
10~20
(m/min)

Aluminum alloy castings
アルミ合金鋳物
10~20
(m/min)

Product Features

- Durability is improved by premium powder HSS and special coating.
- Chip ejection efficiency is improved and cutting resistance is reduced by the unique cutting edge shape, achieving a good internal thread and long tool life.
- Appropriate tool projection length is secured, preventing chips from interfering with the holder.
- Best suitable for tapping with water soluble cutting fluid.
- VUSP CH has the most effective coolant through hole size for internal lubrication that can supply adequate cutting fluid to the chamfer part. This leads to high performance of cooling, prevention of welding and wear resistance, and achieves the excellent thread surface finish. Chips are smoothly ejected from bored holes to ensure consecutive tapping.

■ Situations by different pressures



1.5 Mpa



3 Mpa



6 Mpa



Tapping Data

Tapping conditions [M6×1]

Workpiece Material	S50C
Tapping Length	12mm
Tapping Speed	20m/min
Machinery Type	Machining center, vertical type
Tapping Fluid	Water soluble cutting fluid
Internal Coolant Pressure	1.5MPa

Tapping conditions [M10×1.5]

Workpiece Material	S50C
Tapping Length	20mm
Tapping Speed	20m/min
Machinery Type	Machining center, vertical type
Tapping Fluid	Water soluble cutting fluid
Internal Coolant Pressure	1.5MPa

After 500 holes (Can continue to be used)

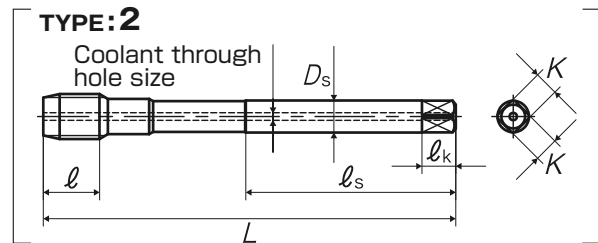
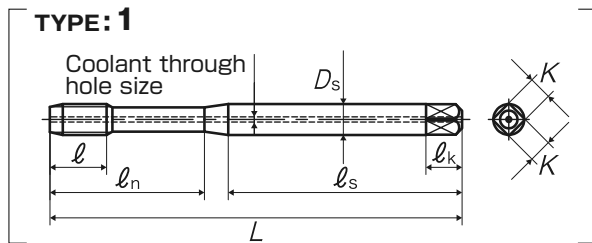
Excellent thread surface	Less damage on the edge	Uniform chips' shape

After 420 holes (Can continue to be used)

Excellent thread surface	Less damage on the edge	Uniform chips' shape

Think threads with
YAMAWA

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



Segment : 1D

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	Coolant hole size (mm)	TYPE	MSRP
For Metric Threads														
M6 × 1	P2	1201101055	C (2.5P)	80	11	30	45	6	4.5	7	3	1	1	¥ 5,010
M8 × 1.25	P3	1201101064	C (2.5P)	90	12	-	46	6.2	5	8	3	1	2	¥ 6,610
M8 × 1	P3	1201101065	C (2.5P)	90	12	-	46	6.2	5	8	3	1	2	¥ 7,810 ※
M10 × 1.5	P3	1201101078	C (2.5P)	100	13	-	51	7	5.5	8	3	1.5	2	¥ 8,340
M10 × 1.25	P3	1201101079	C (2.5P)	100	13	-	51	7	5.5	8	3	1.5	2	¥ 8,340
M10 × 1	P3	1201101080	C (2.5P)	100	13	-	51	7	5.5	8	3	1.5	2	¥ 9,900 ※
M12 × 1.75	P4	1201101088	C (2.5P)	110	15	-	56	8.5	6.5	9	3	2	2	¥ 11,000
M12 × 1.5	P3	1201101089	C (2.5P)	110	15	-	56	8.5	6.5	9	3	2	2	¥ 11,000 ※
M12 × 1.25	P3	1201101090	C (2.5P)	110	15	-	56	8.5	6.5	9	3	2	2	¥ 11,000
M14 × 2	P4	1201101100	C (2.5P)	110	18	-	56	10.5	8	11	3	2	2	¥ 15,000
M14 × 1.5	P3	1201101102	C (2.5P)	110	14	-	56	10.5	8	11	3	2	2	¥ 15,000
M16 × 2	P4	1201101114	C (2.5P)	110	18	-	56	12.5	10	13	3	2	2	¥ 19,500
M16 × 1.5	P3	1201101116	C (2.5P)	110	14	-	56	12.5	10	13	3	2	2	¥ 19,500

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-22

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

ANSI
① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

Z-PRO

VUSP CH



Z-PRO

Coated Spiral Fluted Taps with Coolant Through Hole

Specification

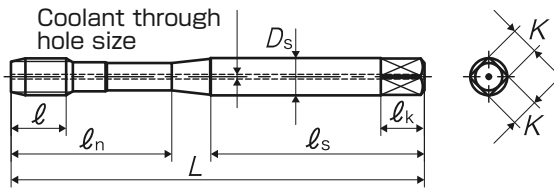


- Durability is improved by premium powder HSS and special coating.
- Chip ejection efficiency is improved and cutting resistance is reduced by the unique cutting edge shape, achieving a good internal thread and long tool life.

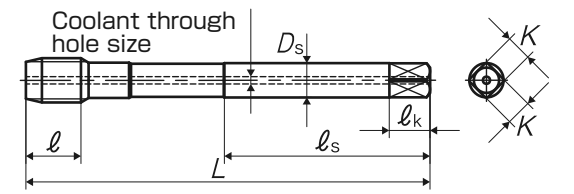
Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 10 ~ 20 (m/min)	Medium carbon steels 中炭素鋼 10 ~ 30 (m/min)	High carbon steels 高炭素鋼 10 ~ 30 (m/min)	Alloy steels 合金鋼 10 ~ 20 (m/min)	Stainless steels ステンレス鋼 3 ~ 10 (m/min)	Tool steels 工具鋼 5 ~ 10 (m/min)	Ductile cast irons 強靱鑄鉄 10 ~ 20 (m/min)
Wrought aluminum アルミ圧延材 10 ~ 20 (m/min)	Aluminum alloy castings アルミ合金鑄物 10 ~ 20 (m/min)					

TYPE: 1



TYPE: 2



Segment : 1D

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	ℓ_s (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	Coolant hole size (inch)	TYPE
For Unified Threads													
5/16-18UNC	GH5	5201103071	2.5P	3.543	0.472	1.378	1.831	0.318	0.238	0.375	3	0.039	1
3/8-16UNC	GH5	5201103082	2.5P	3.937	0.512	1.535	2.028	0.381	0.286	0.437	3	0.059	1
1/2-13UNC	GH5	5201103111	2.5P	4.331	0.591	-	2.205	0.367	0.275	0.437	3	0.079	2

ANSI

①-23

Think threads with
YAMAWA

・ This product is different from JIS products in shape and dimensions, please be careful when using.

Spiral Fluted Tap Series for blind hole

DIN

Z-PRO

VUSP CH



Z-PRO

Coated Spiral Fluted Taps with Coolant Through Hole

Specification

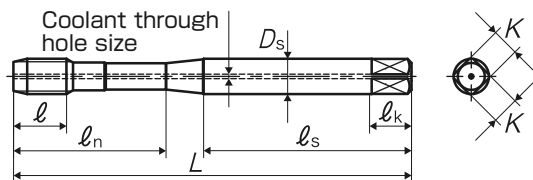


- Durability is improved by premium powder HSS and special coating.
- Chip ejection efficiency is improved and cutting resistance is reduced by the unique cutting edge shape, achieving a good internal thread and long tool life.

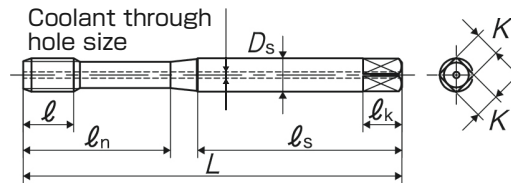
Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 10~20 (m/min)	Medium carbon steels 中炭素鋼 10~30 (m/min)	High carbon steels 高炭素鋼 10~30 (m/min)	Alloy steels 合金鋼 10~20 (m/min)	Stainless steels ステンレス鋼 3~10 (m/min)	Tool steels 工具鋼 5~10 (m/min)	Ductile cast irons 強靱鑄鉄 10~20 (m/min)
Wrought aluminum アルミ圧延材 10~20 (m/min)	Aluminum alloy castings アルミ合金鑄物 10~20 (m/min)					

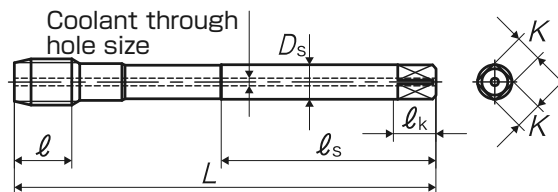
TYPE:2



TYPE:1



TYPE:3



Segment : 1D

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Coolant hole size (mm)	TYPE
For Metric Threads													
M6 × 1	ISO2X	3201101055	2.5P	80	11	30	45	6	4.9	8	3	1	1
M8 × 1.25	ISO2X	3201101064	2.5P	90	12	35	47	8	6.2	9	3	1	2
M8 × 1	ISO2X	3201101065	2.5P	90	12	-	46	6	4.9	8	3	1	3
M10 × 1.5	ISO2X	3201101078	2.5P	100	13	39	52	10	8	11	3	1.5	2
M10 × 1.25	ISO2X	3201101079	2.5P	100	13	-	51	7	5.5	8	3	1.5	3
M10 × 1	ISO2X	3201101080	2.5P	90	13	-	46	7	5.5	8	3	1.5	3
M12 × 1.75	ISO2X	3201101088	2.5P	110	15	-	56	9	7	10	3	2	3
M12 × 1.5	ISO2X	3201101089	2.5P	100	15	-	51	9	7	10	3	2	3
M12 × 1.25	ISO2X	3201101090	2.5P	100	15	-	51	9	7	10	3	2	3
M14 × 2	ISO2X	3201101100	2.5P	110	18	-	56	11	9	12	3	2	3
M14 × 1.5	ISO2X	3201101102	2.5P	100	14	-	51	11	9	12	3	2	3
M16 × 2	ISO2X	3201101114	2.5P	110	18	-	56	12	9	12	3	2	3
M16 × 1.5	ISO2X	3201101116	2.5P	100	14	-	51	12	9	12	3	2	3
For Unified Threads													
5/16-18UNC	2BX	3201103071	2.5P	90	12	35	47	8	6.2	9	3	1	2
3/8-16UNC	2BX	3201103082	2.5P	100	13	39	54	9	7	10	3	1.5	2
1/2-13UNC	2BX	3201103111	2.5P	110	15	-	56	9	7	10	3	2	3

· This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

1

DIN

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
Premium Thread Mills

Dies

Center Drills
Centering Tools

Precision Machinery/
Medical Surgical Instruments

DIN

①-24

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

Z-PRO
HVSP

Z-PRO
Hybrid Value Spiral Fluted Taps for Steels



Specification



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	Thermal refined steels 調質鋼	Stainless steels ステンレス鋼	Cast steels 鋳鋼
3~12 (m/min)	3~12 (m/min)	3~12 (m/min)	3~12 (m/min)	~5 (m/min)	~5 (m/min)	3~12 (m/min)
25~35HRC						

Product Features

- YAMAWA has designed a flute shape and cutting edge angle to improve the chip ejection properties.
- A heel grind on the rear threads has improved the performance of the tap and eliminated the materials chip residue in the threads that is caused on reversal by the tap's end threads.
- With no chips left in the threads, the tapping operation is less likely to chip the flutes or threads of the tap during the tap's reversal.
- There are several full threads after the cutting chamfer and a special heel grind to the balance of the threads to reduce their full thread height, thereby reducing any chance of chipping the flutes.

Tapping Data

•Improvement of chipped flutes Tapping conditions [M36 × 4]

Work Piece Material	SS400
Tapping Speed	3m/min
Tapping Length	50mm
Machinery Type	Radial drilling machine
Tapping Fluid	Non-water soluble cutting oil

◎Full Thread Part



◎Chamfer Part



•Compatible with a wide range of workpiece machining. Tapping conditions

	Material	Recommended Tapping Speed (m/min)
Stainless Steel	SUS303/SUS304/SUS316	~5
Alloy Steel	SCM/SCr	3~12
High Carbon Steel	S45C~	3~12
Medium Carbon Steel	S25C~S45C	3~12
Low Carbon Steel	~S20C/SS400	3~12
Thermal refined steel		~5
Cast steel		3~12

Excellent Surface Finish



JIS

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

1

JIS

Spiral Fluted Taps
(for blind hole) ①Spiral Fluted Taps
(for through hole) ②Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

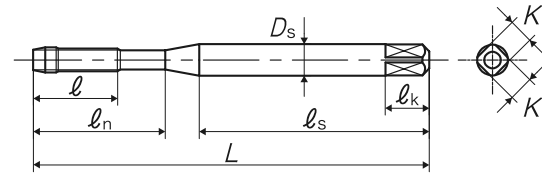
Dies ⑩

Center Drills
Centering Tools ⑪Precision Machinery/
Medical Surgical Instruments ⑫

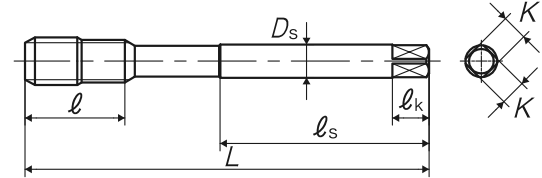
JIS

①-26

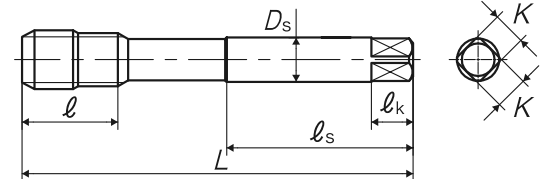
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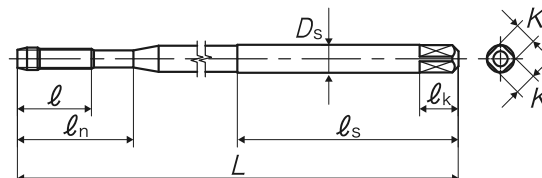
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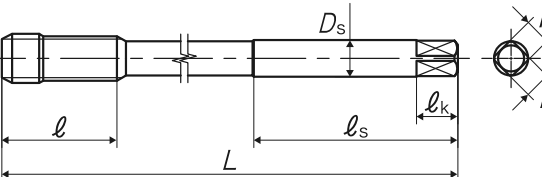
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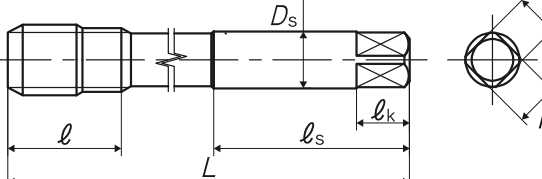
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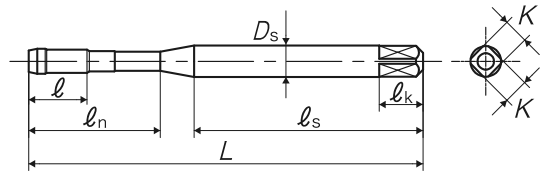
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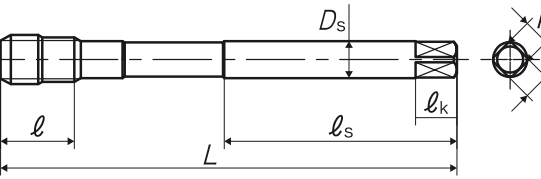
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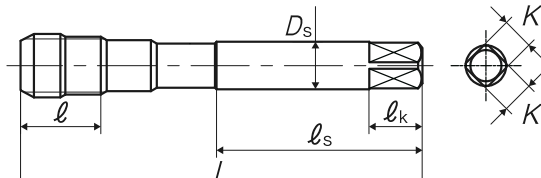
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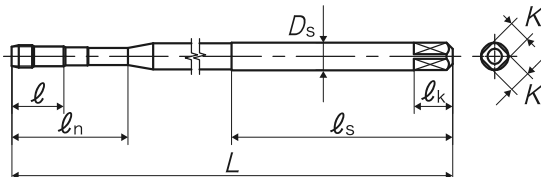
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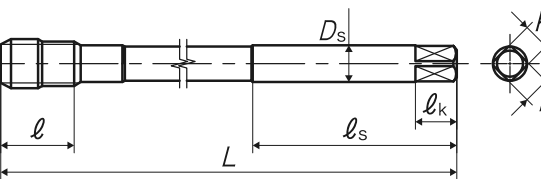
TYPE: 6



TYPE: 8



TYPE: 10



① Spiral Fluted Tap Series for blind hole

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

JIS

HVSP Z-PRO Hybrid Value Spiral Fluted Taps for Steels

Segment : 1C

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M2×0.4	P2	SY2.0EQEEXJ	C (2.5P)	45	8	15	27	3	2.5	5	2	1	¥ 2,660
M2.2×0.45	P2	SY2.2FQEEXJ	C (2.5P)	45	9	15	27	3	2.5	5	2	1	¥ 2,570
M2.3×0.4	P2	SY2.3EQEEXJ	C (2.5P)	45	9	15	27	3	2.5	5	2	1	¥ 2,570
M2.5×0.45	P2	SY2.5FQEEXJ	C (2.5P)	50	8	15	32	3	2.5	5	2	1	¥ 2,170
M2.6×0.45	P2	SY2.6FQEEXJ	C (2.5P)	50	8	15	32	3	2.5	5	2	1	¥ 2,170
M3×0.5	P3	SY3.0GREEXJ	C (2.5P)	56	9	18	32	4	3.2	6	3	1	¥ 1,400
3M0.6	P2	SY3.0HQEEXJ	C (2.5P)	56	5	18	32	4	3.2	6	3	1	¥ 1,450 ※
M3×0.35	P3	SY3.0DREEXJ	C (2.5P)	56	6.5	18	32	4	3.2	6	3	2	¥ 2,470
M4×0.7	P4	SY4.0ISEEXJ	C (2.5P)	63	13	21	36	5	4	7	3	1	¥ 1,400
4M0.75	P3	SY4.0JREEXJ	C (2.5P)	63	7	21	36	5	4	7	3	1	¥ 1,450
M4×0.5	P4	SY4.0GSEEXJ	C (2.5P)	63	9	21	36	5	4	7	3	2	¥ 2,120
M5×0.8	P4	SY5.0KSEEXJ	C (2.5P)	70	14	25	40	5.5	4.5	7	3	1	¥ 1,410
5M0.9	P3	SY5.0LREEXJ	C (2.5P)	70	9	25	40	5.5	4.5	7	3	1	¥ 1,530 ※
M5×0.5	P4	SY5.0GSEEXJ	C (2.5P)	70	9	25	40	5.5	4.5	7	3	2	¥ 2,120
M6×1	P4	SY6.0MSEEXJ	C (2.5P)	80	15	30	45	6	4.5	7	3	1	¥ 1,610
M6×0.75	P4	SY6.0JSEEXJ	C (2.5P)	80	15	30	45	6	4.5	7	3	1	¥ 2,270
M6×0.5	P4	SY6.0GSEEXJ	C (2.5P)	80	9	30	45	6	4.5	7	3	2	¥ 2,270
M7×1	P4	SY7.0MSEEXJ	C (2.5P)	90	15	-	46	6.2	5	8	3	3	¥ 1,980
M7×0.75	P3	SY7.0JREEXJ	C (2.5P)	90	15	-	46	6.2	5	8	3	3	¥ 2,930 ※
M7×0.5	P3	SY7.0GREEXJ	C (2.5P)	90	10	-	46	6.2	5	8	3	4	¥ 3,650 ※
M8×1.25	P4	SY8.0NSEEXJ	C (2.5P)	90	19	-	46	6.2	5	8	3	3	¥ 2,270
M8×1	P4	SY8.0MSEEXJ	C (2.5P)	90	19	-	46	6.2	5	8	3	3	¥ 2,580
M8×0.75	P3	SY8.0JREEXJ	C (2.5P)	90	19	-	46	6.2	5	8	3	3	¥ 2,930 ※
M8×0.5	P3	SY8.0GREEXJ	C (2.5P)	90	10	-	46	6.2	5	8	3	4	¥ 3,650 ※
M10×1.5	P4	SY010OSEEXJ	C (2.5P)	100	23	-	51	7	5.5	8	3	3	¥ 2,970
M10×1.25	P4	SY010NSEEXJ	C (2.5P)	100	23	-	51	7	5.5	8	3	3	¥ 2,970
M10×1	P4	SY010MSEEXJ	C (2.5P)	100	23	-	51	7	5.5	8	3	3	¥ 3,520
M11×1.25	P4	SY011NSEEXJ	C (2.5P)	110	26	-	56	8.5	6.5	9	3	3	¥ 4,230 ※
M11×1	P4	SY011MSEEXJ	C (2.5P)	110	26	-	56	8.5	6.5	9	3	3	¥ 4,860
M12×1.75	P4	SY012PSEEXJ	C (2.5P)	110	26	-	56	8.5	6.5	9	3	3	¥ 4,000
M12×1.5	P4	SY012OSEEXJ	C (2.5P)	110	26	-	56	8.5	6.5	9	3	3	¥ 4,000
M12×1.25	P4	SY012NSEEXJ	C (2.5P)	110	26	-	56	8.5	6.5	9	3	3	¥ 4,000
M12×1	P4	SY012MSEEXJ	C (2.5P)	110	26	-	56	8.5	6.5	9	3	3	¥ 4,860
M14×2	P4	SY014QSEEXJ	C (2.5P)	110	26	-	56	10.5	8	11	3	3	¥ 5,640
M14×1.5	P4	SY014OSEEXJ	C (2.5P)	110	26	-	56	10.5	8	11	3	3	¥ 5,640
M14×1.25	P4	SY014NSEEXJ	C (2.5P)	110	26	-	56	10.5	8	11	3	3	¥ 6,560
M14×1	P4	SY014MSEEXJ	C (2.5P)	110	26	-	56	10.5	8	11	3	3	¥ 6,560
M15×1.5	P4	SY015OSEEXJ	C (2.5P)	110	26	-	56	12.5	10	13	3	3	¥ 7,690
M16×2	P4	SY016QSEEXJ	C (2.5P)	110	26	-	56	12.5	10	13	3	3	¥ 7,300
M16×1.5	P4	SY016OSEEXJ	C (2.5P)	110	26	-	56	12.5	10	13	3	3	¥ 7,300
M16×1.25	P4	SY016NSEEXJ	C (2.5P)	110	26	-	56	12.5	10	13	3	3	¥ 9,260
M16×1	P4	SY016MSEEXJ	C (2.5P)	110	26	-	56	12.5	10	13	3	3	¥ 9,260
M18×2.5	P5	SY018RTEEXJ	C (2.5P)	125	33	-	64	14	11	14	4	3	¥ 10,100
M18×2	P5	SY018QTEEXJ	C (2.5P)	125	33	-	64	14	11	14	4	3	¥ 10,100
M18×1.5	P5	SY018OTEEXJ	C (2.5P)	125	33	-	64	14	11	14	4	3	¥ 10,100
M18×1.25	P4	SY018NSEEXJ	C (2.5P)	125	33	-	64	14	11	14	4	3	¥ 13,100 ※
M18×1	P4	SY018MSEEXJ	C (2.5P)	125	18	-	64	14	11	14	4	4	¥ 13,100
M19×1.5	P5	SY019OTEEXJ	C (2.5P)	140	33	-	71	15	12	15	4	5	¥ 13,700 ※
M20×2.5	P5	SY020RTEEXJ	C (2.5P)	140	33	-	71	15	12	15	4	5	¥ 13,700

① Spiral Fluted Taps (for blind hole)

② Spiral Fluted Taps (for through hole)

③ Spiral Pointed Taps (for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills Premium Thread Mills

⑩ Dies

⑪ Center Drills Centering Tools

⑫ Precision Machinery/ Medical Surgical Instruments

JIS

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

HVSP Z-PRO Hybrid Value Spiral Fluted Taps for Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M20×2	P5	SY020QTEEXJ	C (2.5P)	140	33	-	71	15	12	15	4	5	¥ 13,700
M20×1.5	P5	SY020OTEEXJ	C (2.5P)	140	33	-	71	15	12	15	4	5	¥ 13,700
M20×1	P4	SY020MSEEXJ	C (2.5P)	140	18	-	71	15	12	15	4	6	¥ 17,400
M22×2.5	P5	SY022RTEEXJ	C (2.5P)	140	33	-	71	17	13	16	4	5	¥ 17,400
M22×2	P5	SY022QTEEXJ	C (2.5P)	140	33	-	71	17	13	16	4	5	¥ 17,400
M22×1.5	P5	SY022OTEEXJ	C (2.5P)	140	33	-	71	17	13	16	4	5	¥ 17,400
M22×1	P4	SY022MSEEXJ	C (2.5P)	140	19	-	71	17	13	16	4	6	¥ 23,300
M24×3	P5	SY024STEEXJ	C (2.5P)	160	37	-	82	19	15	18	4	5	¥ 21,700
M24×2	P5	SY024QTEEXJ	C (2.5P)	160	37	-	82	19	15	18	4	5	¥ 21,700
M24×1.5	P5	SY024OTEEXJ	C (2.5P)	160	37	-	82	19	15	18	4	5	¥ 21,700
M24×1	P4	SY024MSEEXJ	C (2.5P)	160	19	-	82	19	15	18	4	6	¥ 28,600 ※
M25×2	P5	SY025QTEEXJ	C (2.5P)	160	37	-	82	19	15	18	4	5	¥ 28,600 ※
M25×1.5	P5	SY025OTEEXJ	C (2.5P)	160	37	-	82	19	15	18	4	5	¥ 28,600
M25×1	P4	SY025MSEEXJ	C (2.5P)	160	20	-	82	19	15	18	4	6	¥ 34,600 ※
M26×3	P5	SY026STEEXJ	C (2.5P)	160	37	-	82	20	15	18	4	5	¥ 30,600 ※
M26×1.5	P5	SY026OTEEXJ	C (2.5P)	160	37	-	82	20	15	18	4	5	¥ 30,600
M26×1	P4	SY026MSEEXJ	C (2.5P)	160	20	-	82	20	15	18	4	6	¥ 38,700 ※
M27×3	P5	SY027STEEXJ	C (2.5P)	160	37	-	82	20	15	18	4	5	¥ 30,600
M27×2	P5	SY027QTEEXJ	C (2.5P)	160	37	-	82	20	15	18	4	5	¥ 30,600
M27×1.5	P5	SY027OTEEXJ	C (2.5P)	160	37	-	82	20	15	18	4	5	¥ 30,600
M28×1.5	P5	SY028OTEEXJ	C (2.5P)	180	44	-	92	23	17	20	4	5	¥ 38,900
M28×1	P4	SY028MSEEXJ	C (2.5P)	180	20	-	92	23	17	20	4	6	¥ 50,000 ※
M30×3.5	P6	SY030TUEEXJ	C (2.5P)	180	44	-	92	23	17	20	4	5	¥ 38,900
M30×3	P6	SY030SUEEXJ	C (2.5P)	180	44	-	92	23	17	20	4	5	¥ 38,900
M30×2	P5	SY030QTEEXJ	C (2.5P)	180	44	-	92	23	17	20	4	5	¥ 38,900
M30×1.5	P6	SY030OUEEXJ	C (2.5P)	180	44	-	92	23	17	20	4	5	¥ 38,900
M30×1	P4	SY030MSEEXJ	C (2.5P)	180	21	-	92	23	17	20	4	6	¥ 50,000 ※
M32×2	P5	SY032QTEEXJ	C (2.5P)	180	44	-	92	24	19	22	4	5	¥ 45,400
M32×1.5	P5	SY032OTEEXJ	C (2.5P)	180	44	-	92	24	19	22	4	5	¥ 45,400
M33×3.5	P6	SY033TUEEXJ	C (2.5P)	180	46	-	92	25	19	22	4	5	¥ 45,400
M33×3	P6	SY033SUEEXJ	C (2.5P)	180	46	-	92	25	19	22	4	5	¥ 45,400
M33×2	P5	SY033QTEEXJ	C (2.5P)	180	46	-	92	25	19	22	4	5	¥ 45,400
M33×1.5	P5	SY033OTEEXJ	C (2.5P)	180	46	-	92	25	19	22	4	5	¥ 45,400
M35×2	P5	SY035QTEEXJ	C (2.5P)	200	52	-	102	28	21	24	4	5	¥ 52,300
M35×1.5	P5	SY035OTEEXJ	C (2.5P)	200	26	-	102	28	21	24	4	6	¥ 52,300
M36×4	P6	SY036UUEEXJ	C (2.5P)	200	52	-	102	28	21	24	4	5	¥ 52,300
M36×3	P6	SY036SUEEXJ	C (2.5P)	200	52	-	102	28	21	24	4	5	¥ 52,300
M36×2	P5	SY036QTEEXJ	C (2.5P)	200	52	-	102	28	21	24	4	5	¥ 52,300
M36×1.5	P5	SY036OTEEXJ	C (2.5P)	200	26	-	102	28	21	24	4	6	¥ 52,300
M39×4	P6	SY039UUEEXJ	C (2.5P)	200	52	-	102	30	23	26	4	5	¥ 60,000
M39×3	P6	SY039SUEEXJ	C (2.5P)	200	52	-	102	30	23	26	4	5	¥ 60,000
M42×4.5	P6	SY042VUEEXJ	C (2.5P)	200	59	-	102	32	26	30	4	5	¥ 73,000
M42×3	P6	SY042SUEEXJ	C (2.5P)	200	59	-	102	32	26	30	4	5	¥ 73,000
M42×1.5	P5	SY042OTEEXJ	C (2.5P)	200	27	-	102	32	26	30	4	6	¥ 73,000 ※
M45×4.5	P6	SY045VUEEXJ	C (2.5P)	220	59	-	112	35	26	30	4	5	¥ 84,500
M45×3	P6	SY045SUEEXJ	C (2.5P)	220	59	-	112	35	26	30	4	5	¥ 84,500 ※
M48×5	P6	SY048WUEEXJ	C (2.5P)	250	65	-	128	38	29	32	4	5	¥ 107,000
M48×3	P6	SY048SUEEXJ	C (2.5P)	250	65	-	128	38	29	32	4	5	¥ 107,000

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-28

① Spiral Fluted Tap Series for blind hole

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

JIS

HVSP Z-PRO Hybrid Value Spiral Fluted Taps for Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
For Unified Threads													
No.2-56UNC	P2	SYUN2EQEEXJ	C (2.5P)	45	4	15	27	3	2.5	5	2	1	¥ 3,030 ※
No.3-48UNC	P2	SYUN3FQEEXJ	C (2.5P)	50	4	15	32	3	2.5	5	2	1	¥ 2,570 ※
No.4-40UNC	P2	SYUN4HQEEXJ	C (2.5P)	56	5	17	32	4	3.2	6	2	1	¥ 1,960 ※
No.5-40UNC	P2	SYUN5HQEEXJ	C (2.5P)	63	5	19	36	5	4	7	3	1	¥ 1,820 ※
No.5-44UNF	P2	SYUN5GQEEXJ	C (2.5P)	63	5	19	36	5	4	7	3	1	¥ 1,820 ※
No.6-32UNC	P3	SYUN6JREEXJ	C (2.5P)	63	7	19	36	5	4	7	3	1	¥ 1,820 ※
No.6-40UNF	P3	SYUN6HREEXJ	C (2.5P)	63	7	19	36	5	4	7	3	1	¥ 1,820 ※
No.8-32UNC	P3	SYUN8JREEXJ	C (2.5P)	70	7	23	40	5.5	4.5	7	3	1	¥ 1,830 ※
No.8-36UNF	P3	SYUN8IREEXJ	C (2.5P)	70	7	23	40	5.5	4.5	7	3	1	¥ 1,830 ※
No.10-24UNC	P3	SYUNAMREEXJ	C (2.5P)	70	9	24	40	5.5	4.5	7	3	1	¥ 1,830 ※
No.10-32UNF	P3	SYUNAJREEXJ	C (2.5P)	70	9	24	40	5.5	4.5	7	3	1	¥ 1,830 ※
No.12-24UNC	P3	SYUNCMREEXJ	C (2.5P)	80	9	28	45	6	4.5	7	3	1	¥ 2,030 ※
No.12-28UNF	P3	SYUNCKREEXJ	C (2.5P)	80	9	28	45	6	4.5	7	3	1	¥ 2,030 ※
1/4-20UNC	P3	SYU04NREEXJ	C (2.5P)	80	11	30	45	6	4.5	7	3	1	¥ 2,030 ※
1/4-28UNF	P3	SYU04KREEXJ	C (2.5P)	80	11	30	45	6	4.5	7	3	1	¥ 2,030 ※
5/16-18UNC	P4	SYU05OSEEXJ	C (2.5P)	90	19	-	46	6.2	5	8	3	3	¥ 2,960 ※
5/16-24UNF	P4	SYU05MSEEXJ	C (2.5P)	90	19	-	46	6.2	5	8	3	3	¥ 2,960 ※
3/8-16UNC	P4	SYU06PSEEXJ	C (2.5P)	100	23	-	51	7	5.5	8	3	3	¥ 3,790 ※
3/8-24UNF	P4	SYU06MSEEXJ	C (2.5P)	100	23	-	51	7	5.5	8	3	3	¥ 3,790 ※
7/16-14UNC	P4	SYU07QSEEXJ	C (2.5P)	110	26	-	56	8.5	6.5	9	3	3	¥ 5,330 ※
7/16-20UNF	P4	SYU07NSEEXJ	C (2.5P)	110	26	-	56	8.5	6.5	9	3	3	¥ 5,330 ※
1/2-13UNC	P4	SYU08RSEEXJ	C (2.5P)	110	26	-	56	10.5	8	11	3	3	¥ 5,650 ※
1/2-20UNF	P4	SYU08NSEEXJ	C (2.5P)	110	26	-	56	10.5	8	11	3	3	¥ 5,650 ※
9/16-12UNC	P4	SYU09SSEEXJ	C (2.5P)	110	26	-	56	12.5	10	13	3	3	¥ 8,790 ※
9/16-18UNF	P4	SYU09OSEEXJ	C (2.5P)	110	26	-	56	12.5	10	13	3	3	¥ 8,790 ※
5/8-11UNC	P4	SYU10USEEXJ	C (2.5P)	110	26	-	56	12.5	10	13	3	3	¥ 8,790 ※
5/8-18UNF	P4	SYU10OSEEXJ	C (2.5P)	110	26	-	56	12.5	10	13	3	3	¥ 8,790 ※
3/4-10UNC	P5	SYU12VTEEXJ	C (2.5P)	140	33	-	71	15	12	15	4	5	¥ 16,100 ※
3/4-16UNF	P4	SYU12PSEEXJ	C (2.5P)	140	33	-	71	15	12	15	4	5	¥ 16,100 ※
7/8-9UNC	P5	SYU14WTEEXJ	C (2.5P)	140	33	-	71	17	13	16	4	5	¥ 23,500 ※
7/8-14UNF	P4	SYU14QSEEXJ	C (2.5P)	140	33	-	71	17	13	16	4	5	¥ 23,500 ※
1 -8UNC	P5	SYU16XTEEXJ	C (2.5P)	160	37	-	82	19	15	18	4	5	¥ 35,900
1 -12UNF	P4	SYU16SSEEXJ	C (2.5P)	160	37	-	82	19	15	18	4	5	¥ 35,900
1 1/8-7UNC	P6	SYU18YUEEXJ	C (2.5P)	180	44	-	92	23	17	20	4	5	¥ 46,200 ※
1 1/8-8UN	P5	SYU18XTEEXJ	C (2.5P)	180	44	-	92	23	17	20	4	5	¥ 46,200 ※
1 1/8-12UNF	P4	SYU18SSEEXJ	C (2.5P)	180	44	-	92	23	17	20	4	5	¥ 46,200 ※
1 1/4-7UNC	P6	SYU20YUEEXJ	C (2.5P)	180	44	-	92	24	19	22	4	5	¥ 54,000 ※
1 1/4-8UN	P5	SYU20XTEEXJ	C (2.5P)	180	44	-	92	24	19	22	4	5	¥ 54,000 ※
1 1/4-12UNF	P4	SYU20SSEEXJ	C (2.5P)	180	44	-	92	24	19	22	4	5	¥ 54,000 ※
1 3/8-6UNC	P6	SYU22ZUEEXJ	C (2.5P)	200	52	-	102	28	21	24	4	5	¥ 66,000 ※
1 3/8-8UN	P5	SYU22XTEEXJ	C (2.5P)	200	52	-	102	28	21	24	4	5	¥ 66,000 ※
1 3/8-12UNF	P4	SYU22SSEEXJ	C (2.5P)	200	52	-	102	28	21	24	4	5	¥ 66,000 ※
1 1/2-6UNC	P6	SYU24ZUEEXJ	C (2.5P)	200	52	-	102	30	23	26	4	5	¥ 73,600 ※
1 1/2-8UN	P5	SYU24XTEEXJ	C (2.5P)	200	52	-	102	30	23	26	4	5	¥ 73,600 ※
1 1/2-12UNF	P4	SYU24SSEEXJ	C (2.5P)	200	52	-	102	30	23	26	4	5	¥ 73,600 ※
1 3/4-5UNC	P6	SYU280UEEXJ	C (2.5P)	220	59	-	112	35	26	30	4	5	¥ 97,100 ※
1 3/4-8UN	P5	SYU28XTEEXJ	C (2.5P)	220	59	-	112	35	26	30	4	5	¥ 97,100 ※
1 3/4-12UN	P4	SYU28SSEEXJ	C (2.5P)	220	59	-	112	35	26	30	4	5	¥ 97,100 ※
2 -4 1/2UNC	P7	SYU329VEEXJ	C (2.5P)	250	73	-	128	40	32	35	4	5	¥ 141,000 ※

① Spiral Fluted Taps (for blind hole)

② Spiral Fluted Taps (for through hole)

③ Spiral Pointed Taps (for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills Premium Thread Mills

Dies

⑩ Center Drills Centering Tools

⑪ Precision Machinery/ Medical Surgical Instruments

JIS

①-29



※ = Specified Distribution Items. Made to order products.

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

HVSP Z-PRO Hybrid Value Spiral Fluted Taps for Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
2 -8UN	P6	SYU32XUEEXJ	C (2.5P)	250	73	-	128	40	32	35	4	5	¥ 141,000 *
For Whitworth Threads													
1/8W40	P2	SYW02HQEEXJ	C (2.5P)	63	5	19	36	5	4	7	3	1	¥ 2,260 *
5/32W32	P3	SYW2HJREEXJ	C (2.5P)	63	7	20	36	5	4	7	3	1	¥ 1,820 *
3/16W24	P3	SYW03MREEXJ	C (2.5P)	70	9	23	40	5.5	4.5	7	3	1	¥ 1,830 *
1/4W20	P3	SYW04NREEXJ	C (2.5P)	80	11	30	45	6	4.5	7	3	1	¥ 2,030 *
5/16W18	P3	SYW05OREEXJ	C (2.5P)	90	19	-	46	6.2	5	8	3	3	¥ 2,960 *
3/8W16	P3	SYW06PREEXJ	C (2.5P)	100	23	-	51	7	5.5	8	3	3	¥ 3,790 *
7/16W14	P4	SYW07QSEEXJ	C (2.5P)	110	26	-	56	8.5	6.5	9	3	3	¥ 5,330 *
1/2W12	P4	SYW08SSEEXJ	C (2.5P)	110	26	-	56	10.5	8	11	3	3	¥ 5,650 *
5/8W11	P4	SYW10USEEXJ	C (2.5P)	110	26	-	56	12.5	10	13	3	3	¥ 8,790 *
3/4W10	P4	SYW12VSEEXJ	C (2.5P)	140	33	-	71	15	12	15	4	5	¥ 16,100 *
7/8W9	P4	SYW14WSEEXJ	C (2.5P)	140	33	-	71	17	13	16	4	5	¥ 23,500 *
1 W8	P4	SYW16XSEEXJ	C (2.5P)	160	37	-	82	19	15	18	4	5	¥ 35,900 *
1 1/4W7	P5	SYW20YTEEXJ	C (2.5P)	180	44	-	92	24	19	22	4	5	¥ 54,000 *
1 1/2W6	P5	SYW24ZTEEXJ	C (2.5P)	200	52	-	102	30	23	26	4	5	¥ 73,600 *
Long shank, for Metric Threads													
M3×0.5	P3	SY3.0GREEXEJ	C (2.5P)	100	9	18	32	4	3.2	6	3	7	¥ 4,340
M3×0.35	P3	SY3.0DREEXEJ	C (2.5P)	100	6.5	18	32	4	3.2	6	3	8	¥ 7,660 *
M4×0.7	P4	SY4.0ISEEXEJ	C (2.5P)	100	11	21	36	5	4	7	3	7	¥ 3,920
M4×0.5	P4	SY4.0GSEEXEJ	C (2.5P)	100	9	21	36	5	4	7	3	8	¥ 5,940 *
M5×0.8	P4	SY5.0KSEEXEJ	C (2.5P)	100	13	25	40	5.5	4.5	7	3	7	¥ 3,250
M5×0.5	P4	SY5.0GSEEXEJ	C (2.5P)	100	9	25	40	5.5	4.5	7	3	8	¥ 4,880 *
M6×1	P4	SY6.0MSEEXEJ	C (2.5P)	100	15	30	45	6	4.5	7	3	7	¥ 2,900
M6×1	P4	SY6.0MSEEXGJ	C (2.5P)	150	15	30	45	6	4.5	7	3	7	¥ 5,320
M6×0.75	P4	SY6.0JSEEXEJ	C (2.5P)	100	15	30	45	6	4.5	7	3	7	¥ 4,090 *
M6×0.5	P4	SY6.0GSEEXEJ	C (2.5P)	100	9	30	45	6	4.5	7	3	8	¥ 4,090 *
M8×1.25	P4	SY8.0NSEEXGJ	C (2.5P)	150	19	-	46	6.2	5	8	3	9	¥ 6,810
M8×1	P4	SY8.0MSEEXGJ	C (2.5P)	150	19	-	46	6.2	5	8	3	9	¥ 7,740 *
M10×1.5	P4	SY010OSEEXGJ	C (2.5P)	150	23	-	51	7	5.5	8	3	9	¥ 8,020
M10×1.25	P4	SY010NSEEXGJ	C (2.5P)	150	23	-	51	7	5.5	8	3	9	¥ 8,020
M10×1	P4	SY010MSEEXGJ	C (2.5P)	150	23	-	51	7	5.5	8	3	9	¥ 9,510 *
M12×1.75	P4	SY012PSEEXGJ	C (2.5P)	150	26	-	56	8.5	6.5	9	3	9	¥ 9,600
M12×1.5	P4	SY012OSEEXGJ	C (2.5P)	150	26	-	56	8.5	6.5	9	3	9	¥ 9,600 *
M12×1.25	P4	SY012NSEEXGJ	C (2.5P)	150	26	-	56	8.5	6.5	9	3	9	¥ 9,600
M14×2	P4	SY014QSEEXGJ	C (2.5P)	150	26	-	56	10.5	8	11	3	9	¥ 11,900
M14×1.5	P4	SY014OSEEXGJ	C (2.5P)	150	26	-	56	10.5	8	11	3	9	¥ 11,900
M16×2	P4	SY016QSEEXGJ	C (2.5P)	150	26	-	56	12.5	10	13	3	9	¥ 13,200
M16×1.5	P4	SY016OSEEXGJ	C (2.5P)	150	26	-	56	12.5	10	13	3	9	¥ 13,200
M18×2.5	P5	SY018RTEEXKJ	C (2.5P)	200	33	-	64	14	11	14	4	9	¥ 22,300 *
M18×2	P5	SY018QTEEXKJ	C (2.5P)	200	33	-	64	14	11	14	4	9	¥ 22,300 *
M18×1.5	P5	SY018OTEEXKJ	C (2.5P)	200	33	-	64	14	11	14	4	9	¥ 22,300 *
M18×1	P4	SY018MSEEXKJ	C (2.5P)	200	18	-	64	14	11	14	4	10	¥ 28,900 *
M20×2.5	P5	SY020RTEEXKJ	C (2.5P)	200	33	-	71	15	12	15	4	11	¥ 30,200
M20×2	P5	SY020QTEEXKJ	C (2.5P)	200	33	-	71	15	12	15	4	11	¥ 30,200 *
M20×1.5	P5	SY020OTEEXKJ	C (2.5P)	200	33	-	71	15	12	15	4	11	¥ 30,200 *
M22×2.5	P5	SY022RTEEXKJ	C (2.5P)	200	33	-	71	17	13	16	4	11	¥ 31,400 *
M22×1.5	P5	SY022OTEEXKJ	C (2.5P)	200	33	-	71	17	13	16	4	11	¥ 31,400 *
M24×3	P5	SY024STEEXNJ	C (2.5P)	250	37	-	82	19	15	18	4	11	¥ 43,400 *
M24×1.5	P5	SY024OTEEXNJ	C (2.5P)	250	37	-	82	19	15	18	4	11	¥ 43,400 *

* = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-30

① Spiral Fluted Tap Series for blind hole

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

JIS

HVSP Z-PRO Hybrid Value Spiral Fluted Taps for Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M27×3	P5	SY027STEEXNJ	C (2.5P)	250	37	-	82	20	15	18	4	11	¥ 52,100 ※
M27×1.5	P5	SY027OTEEXNJ	C (2.5P)	250	37	-	82	20	15	18	4	11	¥ 52,100 ※
M30×3.5	P6	SY030TUEEXNJ	C (2.5P)	250	44	-	92	23	17	20	4	11	¥ 66,200 ※
M30×3	P6	SY030SUEEXNJ	C (2.5P)	250	44	-	92	23	17	20	4	11	¥ 66,200 ※
M30×1.5	P6	SY030OUEEXNJ	C (2.5P)	250	44	-	92	23	17	20	4	11	¥ 66,200 ※
M33×3.5	P6	SY033TUEEXNJ	C (2.5P)	250	46	-	92	25	19	22	4	11	¥ 77,200 ※
M33×3	P6	SY033SUEEXNJ	C (2.5P)	250	46	-	92	25	19	22	4	11	¥ 77,200 ※
M36×4	P6	SY036UUEEXQJ	C (2.5P)	300	52	-	102	28	21	24	4	11	¥ 89,000 ※
M36×3	P6	SY036SUEEXQJ	C (2.5P)	300	52	-	102	28	21	24	4	11	¥ 89,000 ※
M39×4	P6	SY039UUEEXQJ	C (2.5P)	300	52	-	102	30	23	26	4	11	¥ 102,000 ※
M39×3	P6	SY039SUEEXQJ	C (2.5P)	300	52	-	102	30	23	26	4	11	¥ 102,000 ※
M42×4.5	P6	SY042VUEEXQJ	C (2.5P)	300	59	-	102	32	26	30	4	11	¥ 125,000 ※
M42×3	P6	SY042SUEEXQJ	C (2.5P)	300	59	-	102	32	26	30	4	11	¥ 125,000 ※
M48×5	P6	SY048WUEEXQJ	C (2.5P)	300	65	-	128	38	29	32	4	11	¥ 182,000 ※
M48×3	P6	SY048SUEEXQJ	C (2.5P)	300	65	-	128	38	29	32	4	11	¥ 182,000 ※

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

Spiral Fluted Tap Series for blind hole

ANSI

Z-PRO HVSP

Z-PRO
Hybrid Value Spiral Fluted Taps for Steels

Specification

HSS

OX
Oxide



■ The HVSP is a spiral flute tap for blind hole tapping where problems existed in chipping the cutting chamfer. It enables trouble free perfect threading.

Tapping Speeds depending on Materials

Low carbon steels
低炭素鋼
3~12
(m/min)

Medium carbon steels
中炭素鋼
3~12
(m/min)

High carbon steels
高炭素鋼
3~12
(m/min)

Alloy steels
合金鋼
3~12
(m/min)

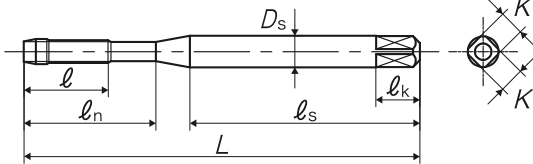
Thermal refined steels
調質鋼
~5
(m/min)

Stainless steels
ステンレス鋼
~5
(m/min)

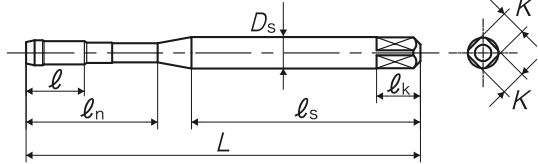
Cast steels
鋳鋼
3~12
(m/min)

25~35HRC

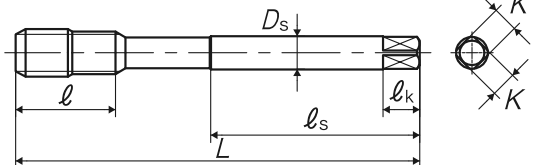
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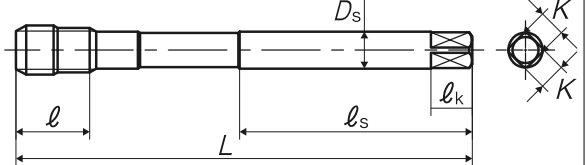
TYPE:2



TYPE:3



TYPE:4



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



1

ANSI

Spiral Fluted Taps
(for blind hole)

1

Spiral Fluted Taps
(for through hole)

2

Spiral Pointed Taps
(for through hole)

3

Hand Taps

4

Cemented
Carbide Taps

5

Roll Taps

6

Special Thread Taps
Simple Inspection Tools

7

Pipe Taps

8

Thread Mills
Premium Thread Mills

9

Dies

10

Center Drills
Centering Tools

11

Precision Machinery/
Medical Surgical Instruments

12

ANSI

1-32

① Spiral Fluted Tap Series for blind hole

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

ANSI

HVSP Z-PRO Hybrid Value Spiral Fluted Taps for Steels

Segment : 1C

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
For Metric Threads												
M2.2 × 0.45	D4	SS2.2F4EEXJ	2.5P	1.772	0.314	0.421	1.161	0.141	0.110	0.187	2	1
M2.3 × 0.4	D4	SS2.3E4EEXJ	2.5P	1.772	0.314	0.429	1.161	0.141	0.110	0.187	2	1
M2.6 × 0.45	D4	SS2.6F4EEXJ	2.5P	2.205	0.354	0.709	1.280	0.141	0.110	0.187	2	1
M3 × 0.5	D4	SS3.0G4EEXJ	2.5P	2.205	0.433	0.736	1.339	0.141	0.110	0.187	3	1
M3 × 0.35	D4	SS3.0D4EEXJ	2.5P	2.205	0.256	0.736	1.339	0.141	0.110	0.187	3	2
M4 × 0.7	D5	SS4.0I5EEXJ	2.5P	2.480	0.512	0.815	1.535	0.168	0.131	0.25	3	1
M4 × 0.5	D4	SS4.0G4EEXJ	2.5P	2.480	0.354	0.815	1.535	0.168	0.131	0.25	3	2
M5 × 0.8	D5	SS5.0K5EEXJ	2.5P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	3	1
M5 × 0.5	D4	SS5.0G4EEXJ	2.5P	2.756	0.354	0.984	1.654	0.194	0.152	0.25	3	2
M6 × 1	D6	SS6.0M6EEXJ	2.5P	3.150	0.591	1.181	1.713	0.255	0.191	0.312	3	1
M6 × 0.75	D6	SS6.0J6EEXJ	2.5P	3.150	0.591	1.181	1.713	0.255	0.191	0.312	3	1
M6 × 0.5	D4	SS6.0G4EEXJ	2.5P	3.150	0.354	1.181	1.713	0.255	0.191	0.312	3	2
M7 × 1	D6	SS7.0M6EEXJ	2.5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	1
M7 × 0.75	D6	SS7.0J6EEXJ	2.5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	1
M7 × 0.5	D5	SS7.0G5EEXJ	2.5P	3.543	0.394	1.339	1.831	0.318	0.238	0.375	3	2
M8 × 1.25	D7	SS8.0N7EEXJ	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	1
M8 × 1	D6	SS8.0M6EEXJ	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	1
M8 × 0.75	D6	SS8.0J6EEXJ	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	1
M8 × 0.5	D5	SS8.0G5EEXJ	2.5P	3.543	0.394	1.378	1.831	0.318	0.238	0.375	3	2
M10 × 1.5	D8	SS010O8EEXJ	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	1
M10 × 1.25	D7	SS010N7EEXJ	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	1
M10 × 1	D6	SS010M6EEXJ	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	1
M11 × 1.25	D7	SS011N7EEXJ	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	3
M11 × 1	D6	SS011M6EEXJ	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	3
M12 × 1.75	D8	SS012P8EEXJ	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	3
M12 × 1.5	D7	SS012O7EEXJ	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	3
M12 × 1.25	D7	SS012N7EEXJ	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	3
M12 × 1	D7	SS012M7EEXJ	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	3
M14 × 2	D9	SS014Q9EEXJ	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	3
M14 × 1.5	D8	SS014O8EEXJ	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	3
M15 × 1.5	D8	SS015O8EEXJ	2.5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	3
M16 × 2	D9	SS016Q9EEXJ	2.5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	3
M16 × 1.5	D8	SS016O8EEXJ	2.5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	3
M16 × 1.25	D7	SS016N7EEXJ	2.5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	3
M18 × 2.5	D9	SS018R9EEXJ	2.5P	4.921	1.299	-	2.520	0.542	0.406	0.625	4	3
M18 × 2	D9	SS018Q9EEXJ	2.5P	4.921	1.299	-	2.520	0.542	0.406	0.625	4	3
M18 × 1.5	D8	SS018O8EEXJ	2.5P	4.921	0.945	-	2.520	0.542	0.406	0.625	4	4
M18 × 1.25	D7	SS018N7EEXJ	2.5P	4.921	0.945	-	2.520	0.542	0.406	0.625	4	4
M18 × 1	D7	SS018M7EEXJ	2.5P	4.921	0.945	-	2.520	0.542	0.406	0.625	4	4
M19 × 1.5	D8	SS019O8EEXJ	2.5P	4.921	0.945	-	2.520	0.590	0.442	0.687	4	4
M20 × 2.5	D9	SS020R9EEXJ	2.5P	5.512	1.299	-	2.795	0.652	0.489	0.687	4	3
M20 × 2	D9	SS020Q9EEXJ	2.5P	5.512	1.299	-	2.795	0.652	0.489	0.687	4	3
M20 × 1.5	D8	SS020O8EEXJ	2.5P	5.512	0.945	-	2.795	0.652	0.489	0.687	4	4
M20 × 1	D7	SS020M7EEXJ	2.5P	5.512	0.945	-	2.795	0.652	0.489	0.687	4	4
M22 × 2.5	D9	SS022R9EEXJ	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	3
M22 × 2	D9	SS022Q9EEXJ	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	3
M22 × 1.5	D8	SS022O8EEXJ	2.5P	5.512	0.945	-	2.795	0.697	0.523	0.75	4	4
M22 × 1	D7	SS022M7EEXJ	2.5P	5.512	0.945	-	2.795	0.697	0.523	0.75	4	4
M24 × 3	D9	SS024S9EEXJ	2.5P	6.299	1.457	-	3.228	0.760	0.570	0.75	4	3

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented
Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

①-33

Think threads with
YAMAWA

・ This product is different from JIS products in shape and dimensions, please be careful when using.

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

HVSP Z-PRO Hybrid Value Spiral Fluted Taps for Steels

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M24 × 2	D9	SS024Q9EEXJ	2.5P	6.299	1.063	-	3.228	0.760	0.570	0.75	4	4
M24 × 1	D7	SS024M7EEXJ	2.5P	6.299	1.063	-	3.228	0.760	0.570	0.75	4	4
M24 × 1.5	D8	SS024O8EEXJ	2.5P	6.299	1.063	-	3.228	0.760	0.570	0.75	4	4
M25 × 2	D9	SS025Q9EEXJ	2.5P	6.299	1.063	-	3.228	0.800	0.600	0.812	4	4
M25 × 1.5	D8	SS025O8EEXJ	2.5P	6.299	1.063	-	3.228	0.800	0.600	0.812	4	4
M25 × 1	D7	SS025M7EEXJ	2.5P	6.299	1.063	-	3.228	0.800	0.600	0.812	4	4
M26 × 3	D10	SS026SOEEXJ	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	3
M26 × 1.5	D8	SS026O8EEXJ	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	4
M26 × 1	D7	SS026M7EEXJ	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	4
M27 × 3	D10	SS027SOEEXJ	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	3
M27 × 2	D9	SS027Q9EEXJ	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	4
M27 × 1.5	D8	SS027O8EEXJ	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	4
M28 × 1.5	D8	SS028O8EEXJ	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	4
M28 × 1	D7	SS028M7EEXJ	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	4
M30 × 3.5	D10	SS030TOEEXJ	2.5P	7.087	1.732	-	3.622	1.021	0.766	1	4	3
M30 × 3	D10	SS030SOEEXJ	2.5P	7.087	1.732	-	3.622	1.021	0.766	1	4	3
M30 × 2	D9	SS030Q9EEXJ	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	4
M30 × 1.5	D8	SS030O8EEXJ	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	4
M30 × 1	D7	SS030M7EEXJ	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	4
M32 × 2	D9	SS032Q9EEXJ	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	4
M32 × 1.5	D8	SS032O8EEXJ	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	4
M33 × 2	D9	SS033Q9EEXJ	2.5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	4
M33 × 3.5	D10	SS033TOEEXJ	2.5P	7.087	1.732	-	3.622	1.108	0.831	1.062	4	3
M33 × 3	D10	SS033SOEEXJ	2.5P	7.087	1.732	-	3.622	1.108	0.831	1.062	4	3
M33 × 1.5	D8	SS033O8EEXJ	2.5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	4
M35 × 2	D9	SS035Q9EEXJ	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	3
M35 × 1.5	D8	SS035O8EEXJ	2.5P	7.874	1.142	-	4.016	1.108	0.831	1.062	4	4
M36 × 4	D10	SS036UOEEXJ	2.5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	3
M36 × 2	D9	SS036Q9EEXJ	2.5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	4
M36 × 3	D10	SS036SOEEXJ	2.5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	3
M36 × 1.5	D8	SS036O8EEXJ	2.5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	4
M39 × 4	D10	SS039UOEEXJ	2.5P	7.874	2.047	-	4.016	1.305	0.979	1.125	4	3
M39 × 3	D10	SS039SOEEXJ	2.5P	7.874	2.047	-	4.016	1.305	0.979	1.125	4	3
M42 × 4.5	D10	SS042VOEEXJ	2.5P	7.874	2.047	-	4.016	1.430	1.072	1.25	4	3
M42 × 3	D10	SS042SOEEXJ	2.5P	7.874	2.047	-	4.016	1.430	1.072	1.25	4	3
M42 × 1.5	D8	SS042O8EEXJ	2.5P	7.874	1.142	-	4.016	1.430	1.072	1.25	4	4
M45 × 4.5	D10	SS045VOEEXJ	2.5P	8.661	2.323	-	4.409	1.519	1.139	1.25	4	3
M45 × 3	D10	SS045SOEEXJ	2.5P	8.661	2.323	-	4.409	1.519	1.139	1.25	4	3
M48 × 5	D11	SS048W-EEXJ	2.5P	9.843	2.559	-	5.039	1.644	1.233	1.375	4	3
M48 × 3	D10	SS048SOEEXJ	2.5P	9.843	2.559	-	5.039	1.644	1.233	1.375	4	3
For Unified Threads												
No.2-56UNC	2BX	SSUN2EYEEXJ	2.5P	1.772	0.157	0.421	1.161	0.141	0.110	0.187	2	1
No.3-48UNC	2BX	SSUN3FYEEXJ	2.5P	2.205	0.157	0.681	1.280	0.141	0.110	0.187	2	1
No.4-40UNC	2BX	SSUN4HYEEXJ	2.5P	2.205	0.197	0.709	1.280	0.141	0.110	0.187	2	1
No.5-40UNC	2BX	SSUN5HYEEXJ	2.5P	2.205	0.197	0.736	1.339	0.141	0.110	0.187	3	1
No.5-44UNF	2BX	SSUN5GYEEXJ	2.5P	2.205	0.197	0.736	1.339	0.141	0.110	0.187	3	1
No.6-32UNC	2BX	SSUN6JYEEXJ	2.5P	2.205	0.276	0.748	1.339	0.141	0.110	0.187	3	1
No.6-40UNF	2BX	SSUN6HYEEXJ	2.5P	2.205	0.276	0.748	1.339	0.141	0.110	0.187	3	1
No.8-32UNC	2BX	SSUN8JYEEXJ	2.5P	2.480	0.276	0.827	1.535	0.168	0.131	0.25	3	1
No.8-36UNF	2BX	SSUN8IYEEXJ	2.5P	2.480	0.276	0.827	1.535	0.168	0.131	0.25	3	1

• This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

1

ANSI

Spiral Fluted Taps
(for blind hole) ①

Spiral Fluted Taps
(for through hole) ②

Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫

ANSI

①-34

① Spiral Fluted Tap Series for blind hole

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

ANSI

HVSP Z-PRO Hybrid Value Spiral Fluted Taps for Steels

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
No.10-24UNC	2BX	SSUNAMYEEEXJ	2.5P	2.756	0.354	0.945	1.654	0.194	0.152	0.25	3	1
No.10-32UNF	2BX	SSUNAJYEEEXJ	2.5P	2.756	0.354	0.945	1.654	0.194	0.152	0.25	3	1
1/4-20UNC	2BX	SSU04NYEEEXJ	2.5P	3.150	0.433	1.181	1.693	0.255	0.165	0.281	3	1
1/4-28UNF	2BX	SSU04KYEEEXJ	2.5P	3.150	0.433	1.181	1.693	0.255	0.165	0.281	3	1
1 -8UNC	2BX	SSU16XYEEEXCJ	2.5P	6.299	1.457	-	3.228	0.800	0.600	0.812	4	3
1 -12UNF	2BX	SSU16SYEEEXCJ	2.5P	6.299	1.457	-	3.228	0.800	0.600	0.812	4	3
1 1/8-7UNC	2BX	SSU18YEEEXCJ	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	3
1 1/8-8UN	2BX	SSU18XYEEEXCJ	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	3
1 1/8-12UNF	2BX	SSU18SYEEEXCJ	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	3
1 1/4-7UNC	2BX	SSU20YEEEXCJ	2.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	3
1 1/4-8UN	2BX	SSU20XYEEEXCJ	2.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	3
1 1/4-12UNF	2BX	SSU20SYEEEXCJ	2.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	3
1 3/8-6UNC	2BX	SSU22ZYEEEXCJ	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	3
1 3/8-8UN	2BX	SSU22XYEEEXCJ	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	3
1 3/8-12UNF	2BX	SSU22SYEEEXCJ	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	3
1 1/2-6UNC	2BX	SSU24ZYEEEXCJ	2.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	3
1 1/2-8UN	2BX	SSU24XYEEEXCJ	2.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	3
1 1/2-12UNF	2BX	SSU24SYEEEXCJ	2.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	3
1 3/4-5UNC	2BX	SSU280YEEEXCJ	2.5P	8.661	2.559	-	4.409	1.430	1.072	1.25	4	3
1 3/4-8UN	2BX	SSU28XYEEEXCJ	2.5P	8.661	2.559	-	4.409	1.430	1.072	1.25	4	3
1 3/4-12UN	2BX	SSU28SYEEEXCJ	2.5P	8.661	2.559	-	4.409	1.430	1.072	1.25	4	3
2 -4 1/2UNC	2BX	SSU329YEEEXCJ	2.5P	9.843	2.874	-	5.039	1.644	1.233	1.375	4	3
2 -8UN	2BX	SSU32XYEEEXCJ	2.5P	9.843	2.874	-	5.039	1.644	1.233	1.375	4	3

①

Spiral Fluted Taps
(for blind hole)

②

Spiral Fluted Taps
(for through hole)

③

Spiral Pointed Taps
(for through hole)

④

Hand Taps

⑤

Cemented
Carbide Taps

⑥

Roll Taps

⑦

Special Thread Taps
Simple Inspection Tools

⑧

Pipe Taps

⑨

Thread Mills
Premium Thread Mills

⑩

Dies

⑪

Center Drills
Centering Tools

⑫

Precision Machinery/
Medical Surgical Instruments

ANSI

①-35

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

Spiral Fluted Tap Series for blind hole

DIN

Z-PRO HVSP

Z-PRO
Hybrid Value Spiral Fluted Taps for Steels

Specification

HSS

OX
Oxide



■ The HVSP is a spiral flute tap for blind hole tapping where problems existed in chipping the cutting chamfer. It enables trouble free perfect threading.

Tapping Speeds depending on Materials

Low carbon steels
低炭素鋼
3~12
(m/min)

Medium carbon steels
中炭素鋼
3~12
(m/min)

High carbon steels
高炭素鋼
3~12
(m/min)

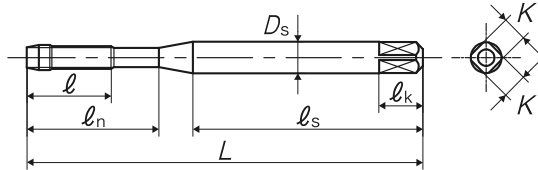
Alloy steels
合金鋼
3~12
(m/min)

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

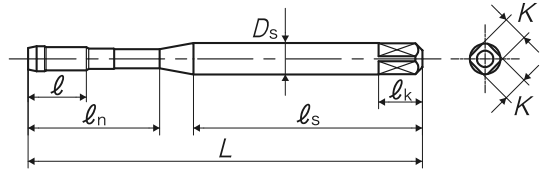
Stainless steels
ステンレス鋼
~5
(m/min)

Cast steels
鋳鋼
3~12
(m/min)

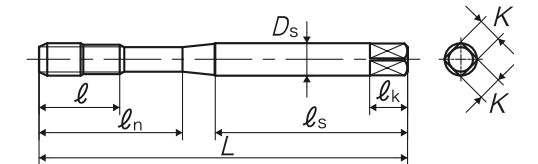
TYPE:1



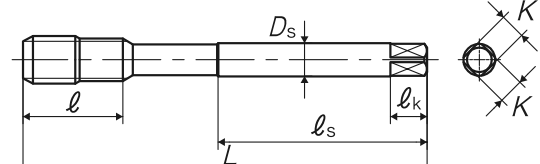
TYPE:2



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
For Metric Threads												
M3 × 0.5	ISO2X	SD3.0GYEEXJ	2.5P	56	9	18	34	3.5	2.7	6	3	1
M3 × 0.35	ISO2X	SD3.0DREEXJ	2.5P	56	6.5	18	34	3.5	2.7	6	3	2
M4 × 0.7	ISO2X	SD4.0IYEEXJ	2.5P	63	13	21	38	4.5	3.4	6	3	1
M4 × 0.5	ISO2X	SD4.0GSEEXJ	2.5P	63	9	21	38	4.5	3.4	6	3	2
M5 × 0.8	ISO2X	SD5.0KYEEXJ	2.5P	70	14	25	39	6	4.9	8	3	1
M5 × 0.5	ISO2X	SD5.0GSEEXJ	2.5P	70	9	25	39	6	4.9	8	3	2
M6 × 1	ISO2X	SD6.0MYEEXJ	2.5P	80	15	30	45	6	4.9	8	3	3
M6 × 0.75	ISO2X	SD6.0JSEEXJ	2.5P	80	15	30	45	6	4.9	8	3	3
M6 × 0.5	ISO2X	SD6.0GSEEXJ	2.5P	80	9	30	45	6	4.9	8	3	3
M8 × 1.25	ISO2X	SD8.0NYEEXJ	2.5P	90	19	35	47	8	6.2	9	3	3
M8 × 1	ISO2X	SM8.0MSEEXJ	2.5P	90	19	-	46	6	4.9	8	3	4
M10 × 1.5	ISO2X	SD010OYEEXJ	2.5P	100	23	39	52.5	10	8	11	3	3
M10 × 1.25	ISO2X	SM010NSEEXJ	2.5P	100	23	-	51	7	5.5	8	3	4
M10 × 1	ISO2X	SM010MSEEXJ	2.5P	90	19	-	46	7	5.5	8	3	4
M12 × 1.75	ISO2X	SG012PSEEXJ	2.5P	110	26	-	56	9	7	10	3	4
M12 × 1.5	ISO2X	SM012OSEEXJ	2.5P	100	21	-	51	9	7	10	3	4
M12 × 1.25	ISO2X	SM012NSEEXJ	2.5P	100	21	-	51	9	7	10	3	4

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



1

DIN

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
Premium Thread Mills

Dies

Center Drills
Centering Tools

Precision Machinery/
Medical Surgical Instruments

DIN

1-36

① Spiral Fluted Tap Series for blind hole

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

DIN

HVSP Z-PRO Hybrid Value Spiral Fluted Taps for Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M14 × 2	ISO2X	SG014QSEEXJ	2.5P	110	26	-	56	11	9	12	3	4
M14 × 1.5	ISO2X	SM014OSEEXJ	2.5P	100	21	-	51	11	9	12	3	4
M16 × 2	ISO2X	SG016QSEEXJ	2.5P	110	26	-	56	12	9	12	3	4
M16 × 1.5	ISO2X	SM016OSEEXJ	2.5P	100	21	-	51	12	9	12	3	4
M18 × 2.5	ISO2X	SG018RTEEXJ	2.5P	125	33	-	64	14	11	14	4	4
M18 × 1.5	ISO2X	SM018OTEEXJ	2.5P	110	24	-	56	14	11	14	4	4
M20 × 2.5	ISO2X	SG020RTEEXJ	2.5P	140	33	-	71	16	12	15	4	4
M20 × 1.5	ISO2X	SM020OTEEXJ	2.5P	125	24	-	64	16	12	15	4	4
M22 × 2.5	ISO2X	SG022RTEEXJ	2.5P	140	33	-	71	18	14.5	17	4	4
M22 × 1.5	ISO2X	SM022OTEEXJ	2.5P	125	24	-	64	18	14.5	17	4	4
M24 × 3	ISO2X	SG024STEEXJ	2.5P	160	37	-	82	18	14.5	17	4	4
M24 × 1.5	ISO2X	SM024OTEEXJ	2.5P	140	27	-	71	18	14.5	17	4	4
M27 × 3	ISO2X	SG027STEEXJ	2.5P	160	37	-	82	20	16	19	4	4
M27 × 1.5	ISO2X	SM027OTEEXJ	2.5P	140	27	-	71	20	16	19	4	4
M30 × 3.5	ISO2X	SG030TBEEEXJ	2.5P	180	44	-	92	22	18	21	4	4
M30 × 3	ISO2X	SM030SUEEXJ	2.5P	180	44	-	92	22	18	21	4	4
M30 × 1.5	ISO2X	SM030OUEEXJ	2.5P	150	27	-	77	22	18	21	4	4
M33 × 3.5	ISO2X	SG033TBEEEXJ	2.5P	180	46	-	92	25	20	23	4	4
M33 × 3	ISO2X	SM033SUEEXJ	2.5P	180	46	-	92	25	20	23	4	4
M36 × 4	ISO2X	SG036UBEEEXJ	2.5P	200	52	-	102	28	22	25	4	4
M36 × 3	ISO2X	SM036SUEEXJ	2.5P	200	52	-	102	28	22	25	4	4
M39 × 4	ISO2X	SG039UBEEEXJ	2.5P	200	52	-	102	32	24	27	4	4
M39 × 3	ISO2X	SM039SUEEXJ	2.5P	200	52	-	102	32	24	27	4	4
M42 × 4.5	ISO2X	SG042VBEEEXJ	2.5P	200	59	-	102	32	24	27	4	4
M42 × 3	ISO2X	SM042SUEEXJ	2.5P	200	59	-	102	32	24	27	4	4
M48 × 5	ISO2X	SG048WBEEEXJ	2.5P	250	65	-	128	36	29	32	4	4
M48 × 3	ISO2X	SM048SUEEXJ	2.5P	225	49	-	115	36	29	32	4	4
For Unified Threads												
No.5-40UNC	2BX	SDUN5HYEEXJ	C (2.5P)	56	5	18	34	3.5	2.7	6	3	1
No.5-44UNF	2BX	SDUN5GYEEXJ	C (2.5P)	56	5	18	34	3.5	2.7	6	3	1
No.6-32UNC	2BX	SDUN6JYEEXJ	C (2.5P)	56	7	19	32	4	3	6	3	1
No.6-40UNF	2BX	SDUN6HYEEXJ	C (2.5P)	56	7	19	32	4	3	6	3	1
No.8-32UNC	2BX	SDUN8JYEEXJ	C (2.5P)	63	7	21	38	4.5	3.4	6	3	1
No.8-36UNF	2BX	SDUN8IYEEXJ	C (2.5P)	63	7	21	38	4.5	3.4	6	3	1
No.10-24UNC	2BX	SDUNAMYEEXJ	C (2.5P)	70	9	24	39	6	4.9	8	3	1
No.10-32UNF	2BX	SDUNAJYEEXJ	C (2.5P)	70	9	24	39	6	4.9	8	3	1
1/4-20UNC	2BX	SDU04NYEEXJ	C (2.5P)	80	11	30	42	7	5.5	8	3	1
1/4-28UNF	2BX	SDU04KYEEXJ	C (2.5P)	80	11	30	42	7	5.5	8	3	1
1 -8UNC	2BX	SGU16XYEEXJ	2.5P	160	37	-	82	18	14.5	17	4	4
1 -12UNF	2BX	SMU16SYEEXJ	2.5P	140	27	-	71	18	14.5	17	4	4
1 1/8-7UNC	2BX	SGU18XYEEXJ	2.5P	180	44	-	92	22	18	21	4	4
1 1/8-8UN	2BX	SMU18XYEEXJ	2.5P	180	44	-	92	22	18	21	4	4
1 1/8-12UNF	2BX	SMU18SYEEXJ	2.5P	150	27	-	77	22	18	21	4	4
1 1/4-7UNC	2BX	SGU20YYEEXJ	2.5P	180	49	-	92	22	18	21	4	4
1 1/4-8UN	2BX	SMU20XYEEXJ	2.5P	180	49	-	92	22	18	21	4	4
1 1/4-12UNF	2BX	SMU20SYEEXJ	2.5P	150	27	-	77	22	18	21	4	4
1 3/8-6UNC	2BX	SGU22ZYEEXJ	2.5P	200	55	-	102	28	22	25	4	4
1 3/8-8UN	2BX	SMU22XYEEXJ	2.5P	200	55	-	102	28	22	25	4	4
1 3/8-12UNF	2BX	SMU22SYEEXJ	2.5P	170	29	-	87	28	22	25	4	4
1 1/2-6UNC	2BX	SGU24ZYEEXJ	2.5P	200	59	-	102	32	24	27	4	4

DIN

①-37

Think threads with
YAMAWA

• This product is different from JIS products in shape and dimensions, please be careful when using.

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

HVSP Z-PRO Hybrid Value Spiral Fluted Taps for Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
1 1/2-8UN	2BX	SMU24XYEEXJ	2.5P	200	59	-	102	32	24	27	4	4
1 1/2-12UNF	2BX	SMU24SYEEXJ	2.5P	170	29	-	87	32	24	27	4	4
1 3/4-5UNC	2BX	SGU280YEEXJ	2.5P	220	65	-	112	36	29	32	4	4
1 3/4-8UN	2BX	SMU28XYEEXJ	2.5P	200	49	-	102	36	29	32	4	4
1 3/4-12UN	2BX	SMU28SYEEXJ	2.5P	180	31	-	92	36	29	32	4	4
2 -4 1/2UNC	2BX	SGU329YEEXJ	2.5P	250	73	-	128	40	32	35	4	4
2 -8UN	2BX	SMU32XYEEXJ	2.5P	225	49	-	115	40	32	35	4	4

1

DIN

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

DIN

①-38

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

Z-PRO HVSP LH

Z-PRO

Hybrid Value Spiral Fluted Taps for Steel for Left Hand Threads



Specification

HSS

OX
Oxide



LH
Left hand

■ Hybrid value spiral fluted tap for steel for left-hand thread with improved chip ejection efficiency and greater chipping resistance.

Tapping Speeds depending on Materials

Low carbon steels
低炭素鋼
3~12
(m/min)

Medium carbon steels
中炭素鋼
3~12
(m/min)

High carbon steels
高炭素鋼
3~12
(m/min)

Alloy steels
合金鋼
3~12
(m/min)

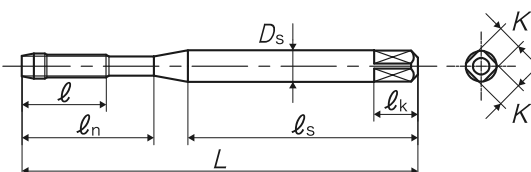
Thermal refined steels
調質鋼
~5
(m/min)

Stainless steels
ステンレス鋼
~5
(m/min)

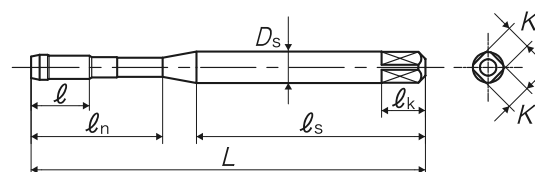
Cast steels
鋳鋼
3~12
(m/min)

25~35HRC

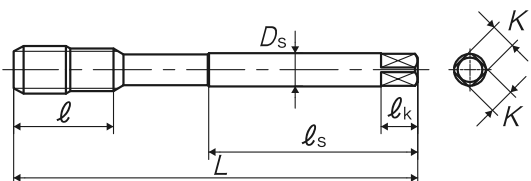
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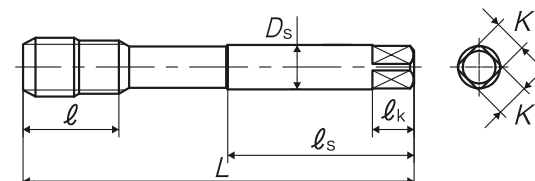
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TYPE:3



TYPE:4



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	MSRP
For Metric Threads													
M2 × 0.4	P2	1116102021	C (2.5P)	45	8	15	27	3	2.5	5	2	1	¥ 3,730 ※
M2.3 × 0.4	P2	1116102026	C (2.5P)	45	9	15	27	3	2.5	5	2	1	¥ 3,600 ※
M2.5 × 0.45	P2	1116102029	C (2.5P)	50	8	15	32	3	2.5	5	2	1	¥ 3,040 ※
M2.6 × 0.45	P2	1116102032	C (2.5P)	50	8	15	32	3	2.5	5	2	1	¥ 3,040 ※
M3 × 0.5	P3	1116102035	C (2.5P)	56	9	18	32	4	3.2	6	3	1	¥ 2,010
M3 × 0.35	P3	1116102036	C (2.5P)	56	6.5	18	32	4	3.2	6	3	2	¥ 3,430 ※
M4 × 0.7	P4	1116102042	C (2.5P)	63	13	21	36	5	4	7	3	1	¥ 2,010
M4 × 0.5	P4	1116102043	C (2.5P)	63	9	21	36	5	4	7	3	2	¥ 2,940 ※
M5 × 0.8	P4	1116102049	C (2.5P)	70	14	25	40	5.5	4.5	7	3	1	¥ 2,030
M5 × 0.5	P4	1116102051	C (2.5P)	70	9	25	40	5.5	4.5	7	3	2	¥ 2,940 ※
M6 × 1	P4	1116102055	C (2.5P)	80	15	30	45	6	4.5	7	3	1	¥ 2,310
M6 × 0.75	P4	1116102056	C (2.5P)	80	15	30	45	6	4.5	7	3	1	¥ 3,260 ※
M6 × 0.5	P4	1116102057	C (2.5P)	80	9	30	45	6	4.5	7	3	2	¥ 3,260 ※
M8 × 1.25	P4	1116102064	C (2.5P)	90	19	-	46	6.2	5	8	3	3	¥ 3,180
M8 × 1	P4	1116102065	C (2.5P)	90	19	-	46	6.2	5	8	3	3	¥ 3,620 ※
M10 × 1.5	P4	1116102078	C (2.5P)	100	23	-	51	7	5.5	8	3	3	¥ 4,160
M10 × 1.25	P4	1116102079	C (2.5P)	100	23	-	51	7	5.5	8	3	3	¥ 4,160

JIS

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

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M10 × 1	P4	1116102080	C (2.5P)	100	23	-	51	7	5.5	8	3	3	¥ 4,930 ※
M12 × 1.75	P4	1116102088	C (2.5P)	110	26	-	56	8.5	6.5	9	3	3	¥ 5,600
M12 × 1.5	P4	1116102089	C (2.5P)	110	26	-	56	8.5	6.5	9	3	3	¥ 5,600 ※
M12 × 1.25	P4	1116102090	C (2.5P)	110	26	-	56	8.5	6.5	9	3	3	¥ 5,600 ※
M14 × 2	P4	1116102100	C (2.5P)	110	26	-	56	10.5	8	11	3	3	¥ 7,900 ※
M14 × 1.5	P4	1116102102	C (2.5P)	110	26	-	56	10.5	8	11	3	3	¥ 7,900 ※
M16 × 2	P4	1116102114	C (2.5P)	110	26	-	56	12.5	10	13	3	3	¥ 10,300
M16 × 1.5	P4	1116102116	C (2.5P)	110	26	-	56	12.5	10	13	3	3	¥ 10,300 ※
M18 × 2.5	P5	1116102128	C (2.5P)	125	33	-	64	14	11	14	4	3	¥ 14,200 ※
M18 × 1.5	P5	1116102130	C (2.5P)	125	33	-	64	14	11	14	4	3	¥ 14,200 ※
M20 × 2.5	P5	1116102141	C (2.5P)	140	33	-	71	15	12	15	4	4	¥ 19,200
M20 × 1.5	P5	1116102144	C (2.5P)	140	33	-	71	15	12	15	4	4	¥ 19,200 ※
M22 × 2.5	P5	1116102156	C (2.5P)	140	33	-	71	17	13	16	4	4	¥ 24,400 ※
M22 × 1.5	P5	1116102158	C (2.5P)	140	33	-	71	17	13	16	4	4	¥ 24,400 ※
M24 × 3	P5	1116102167	C (2.5P)	160	37	-	82	19	15	18	4	4	¥ 30,400
M24 × 1.5	P5	1116102170	C (2.5P)	160	37	-	82	19	15	18	4	4	¥ 30,400 ※
For Unified Threads													
No.5-40UNC	P2	1116104021	C (2.5P)	63	5	19	36	5	4	7	3	1	¥ 2,370 ※
No.5-44UNF	P2	1116104022	C (2.5P)	63	5	19	36	5	4	7	3	1	¥ 2,370 ※
No.6-32UNC	P3	1116104023	C (2.5P)	63	7	19	36	5	4	7	3	1	¥ 2,370 ※
No.6-40UNF	P3	1116104024	C (2.5P)	63	7	19	36	5	4	7	3	1	¥ 2,370 ※
No.8-32UNC	P3	1116104029	C (2.5P)	70	7	23	40	5.5	4.5	7	3	1	¥ 2,380 ※
No.8-36UNF	P3	1116104030	C (2.5P)	70	7	23	40	5.5	4.5	7	3	1	¥ 2,380 ※
No.10-24UNC	P3	1116104039	C (2.5P)	70	9	24	40	5.5	4.5	7	3	1	¥ 2,380 ※
No.10-32UNF	P3	1116104041	C (2.5P)	70	9	24	40	5.5	4.5	7	3	1	¥ 2,380 ※
1/4-20UNC	P3	1116104058	C (2.5P)	80	11	30	45	6	4.5	7	3	1	¥ 2,640 ※
1/4-28UNF	P3	1116104062	C (2.5P)	80	11	30	45	6	4.5	7	3	1	¥ 2,640 ※

1

JIS

Spiral Fluted Taps
(for blind hole) ①Spiral Fluted Taps
(for through hole) ②Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪Precision Machinery/
Medical Surgical Instruments ⑫

JIS

①-40

① Spiral Fluted Tap Series for blind hole

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

ANSI

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

Z-PRO HVSP LH

Z-PRO

Hybrid Value Spiral Fluted Taps for Steel for Left Hand Threads



Specification

HSS

OX
Oxide



LH
Left hand

■ Hybrid value spiral fluted tap for steel for left-hand thread with improved chip ejection efficiency and greater chipping resistance.

Tapping Speeds depending on Materials

Low carbon steels
低炭素鋼
3~12
(m/min)

Medium carbon steels
中炭素鋼
3~12
(m/min)

High carbon steels
高炭素鋼
3~12
(m/min)

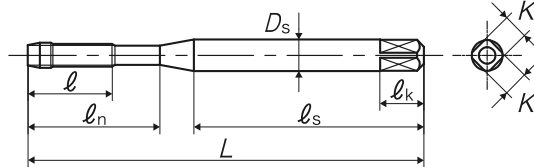
Alloy steels
合金鋼
3~12
(m/min)

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

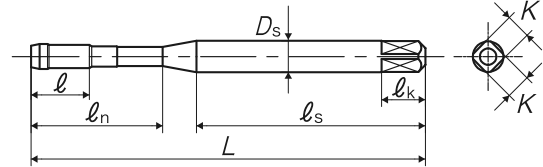
Stainless steels
ステンレス鋼
~5
(m/min)

Cast steels
鋳鋼
3~12
(m/min)

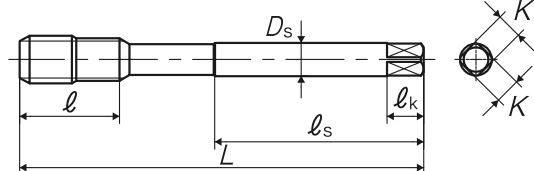
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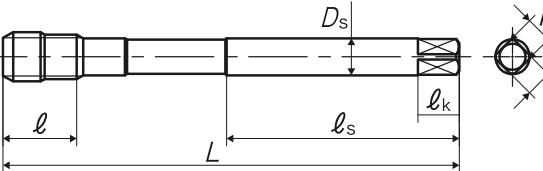
TYPE:2



TYPE:3



TYPE:4



ANSI

①-41

Think threads with
YAMAWA

・ This product is different from JIS products in shape and dimensions, please be careful when using.

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

Segment : 1C

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
For Metric Threads												
M2 × 0.4	D4	5116102021	2.5P	1.772	0.314	0.382	1.161	0.141	0.110	0.187	2	1
M2.3 × 0.4	D4	5116102026	2.5P	1.772	0.314	0.429	1.161	0.141	0.110	0.187	2	1
M2.5 × 0.45	D4	5116102029	2.5P	2.205	0.354	0.693	1.280	0.141	0.110	0.187	2	1
M2.6 × 0.45	D4	5116102032	2.5P	2.205	0.354	0.709	1.280	0.141	0.110	0.187	2	1
M3 × 0.5	D4	5116102035	2.5P	2.205	0.433	0.736	1.339	0.141	0.110	0.187	3	1
M3 × 0.35	D4	5116102036	2.5P	2.205	0.256	0.736	1.339	0.141	0.110	0.187	3	2
M4 × 0.7	D5	5116102042	2.5P	2.480	0.512	0.815	1.535	0.168	0.131	0.25	3	1
M4 × 0.5	D4	5116102043	2.5P	2.480	0.354	0.815	1.535	0.168	0.131	0.25	3	2
M5 × 0.8	D5	5116102049	2.5P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	3	1
M5 × 0.5	D4	5116102051	2.5P	2.756	0.354	0.984	1.654	0.194	0.152	0.25	3	2
M6 × 1	D6	5116102055	2.5P	3.150	0.591	1.181	1.693	0.255	0.191	0.312	3	1
M6 × 0.75	D6	5116102056	2.5P	3.150	0.591	1.181	1.693	0.255	0.191	0.312	3	1
M6 × 0.5	D4	5116102057	2.5P	3.150	0.354	1.181	1.693	0.255	0.191	0.312	3	2
M8 × 1.25	D7	5116102064	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	1
M8 × 1	D6	5116102065	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	1
M10 × 1.5	D8	5116102078	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	1
M10 × 1.25	D7	5116102079	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	1
M10 × 1	D6	5116102080	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	1
M12 × 1.75	D8	5116102088	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	3
M12 × 1.5	D7	5116102089	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	3
M12 × 1.25	D7	5116102090	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	3
M14 × 2	D9	5116102100	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	3
M14 × 1.5	D8	5116102102	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	3
M16 × 2	D9	5116102114	2.5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	3
M16 × 1.5	D8	5116102116	2.5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	3
M18 × 2.5	D9	5116102128	2.5P	4.921	1.299	-	2.520	0.542	0.406	0.625	4	3
M18 × 1.5	D8	5116102130	2.5P	4.921	0.945	-	2.520	0.542	0.406	0.625	4	4
M20 × 2.5	D9	5116102141	2.5P	5.512	1.299	-	2.795	0.652	0.489	0.687	4	3
M20 × 1.5	D8	5116102144	2.5P	5.512	0.945	-	2.795	0.652	0.489	0.687	4	4
M22 × 2.5	D9	5116102156	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	3
M22 × 1.5	D8	5116102158	2.5P	5.512	0.945	-	2.795	0.697	0.523	0.75	4	4
M24 × 3	D9	5116102167	2.5P	6.299	1.457	-	3.228	0.760	0.570	0.75	4	3
M24 × 1.5	D8	5116102170	2.5P	6.299	1.063	-	3.228	0.760	0.570	0.75	4	4
For Unified Threads												
No.3-48UNC	2BX	5116104012	2.5P	2.205	0.157	0.681	1.280	0.141	0.110	0.187	2	1
No.4-40UNC	2BX	5116104015	2.5P	2.205	0.197	0.709	1.280	0.141	0.110	0.187	2	1
No.5-40UNC	2BX	5116104021	2.5P	2.205	0.197	0.736	1.339	0.141	0.110	0.187	3	1
No.5-44UNF	2BX	5116104022	2.5P	2.205	0.197	0.736	1.339	0.141	0.110	0.187	3	1
No.6-32UNC	2BX	5116104023	2.5P	2.205	0.276	0.748	1.339	0.141	0.110	0.187	3	1
No.6-40UNF	2BX	5116104024	2.5P	2.205	0.276	0.748	1.339	0.141	0.110	0.187	3	1
No.8-32UNC	2BX	5116104029	2.5P	2.480	0.276	0.827	1.535	0.168	0.131	0.25	3	1
No.8-36UNF	2BX	5116104030	2.5P	2.480	0.276	0.827	1.535	0.168	0.131	0.25	3	1
No.10-24UNC	2BX	5116104039	2.5P	2.756	0.354	0.945	1.654	0.194	0.152	0.25	3	1
No.10-32UNF	2BX	5116104041	2.5P	2.756	0.354	0.945	1.654	0.194	0.152	0.25	3	1
1/4-20UNC	2BX	5116104058	2.5P	3.150	0.433	1.181	1.693	0.255	0.191	0.312	3	1
1/4-28UNF	2BX	5116104062	2.5P	3.150	0.433	1.181	1.693	0.255	0.191	0.312	3	1

• This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

1

ANSI

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

ANSI

①-42

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-43



Z-PRO

HVSP LH

Z-PRO

Hybrid Value Spiral Fluted Taps for Steel for Left Hand Threads



Specification

HSS

OX
Oxide



LH
Left hand

■ Hybrid value spiral fluted tap for steel for left-hand thread with improved chip ejection efficiency and greater chipping resistance.

Tapping Speeds depending on Materials

Low carbon steels
低碳素鋼
3~12
(m/min)

Medium carbon steels
中炭素鋼
3~12
(m/min)

High carbon steels
高炭素鋼
3~12
(m/min)

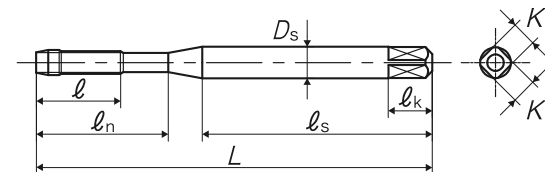
Alloy steels
合金鋼
3~12
(m/min)

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

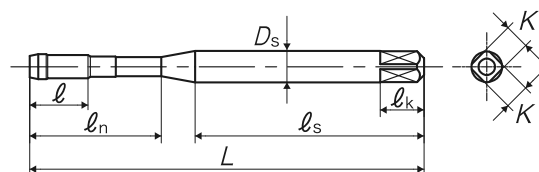
Stainless steels
ステンレス鋼
~5
(m/min)

Cast steels
鋳鋼
3~12
(m/min)

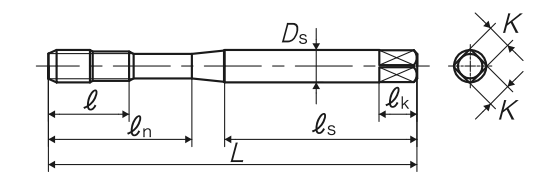
TYPE: 1



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
For Metric Threads												
M3 × 0.5	ISO2X	3116102035	2.5P	56	9	18	34	3.5	2.7	6	3	1
M3 × 0.35	ISO2X	3116102036	2.5P	56	6.5	18	34	3.5	2.7	6	3	2
M4 × 0.7	ISO2X	3116102042	2.5P	63	13	21	38	4.5	3.4	6	3	1
M4 × 0.5	ISO2X	3116102043	2.5P	63	9	21	38	4.5	3.4	6	3	2
M5 × 0.8	ISO2X	3116102049	2.5P	70	14	25	39	6	4.9	8	3	1
M5 × 0.5	ISO2X	3116102051	2.5P	70	9	25	39	6	4.9	8	3	2
M6 × 1	ISO2X	3116102055	2.5P	80	15	30	45	6	4.9	8	3	3
M6 × 0.75	ISO2X	3116102056	2.5P	80	15	30	45	6	4.9	8	3	3
M6 × 0.5	ISO2X	3116102057	2.5P	80	9	30	45	6	4.9	8	3	3
For Unified Threads												
No.5-40UNC	2BX	3116104021	2.5P	56	5	18	34	3.5	2.7	6	3	1
No.5-44UNF	2BX	3116104022	2.5P	56	5	18	34	3.5	2.7	6	3	1
No.6-32UNC	2BX	3116104023	2.5P	56	7	19	32	4	3	6	3	1
No.6-40UNF	2BX	3116104024	2.5P	56	7	19	32	4	3	6	3	1
No.8-32UNC	2BX	3116104029	2.5P	63	7	21	38	4.5	3.4	6	3	1
No.8-36UNC	2BX	3116104030	2.5P	63	7	21	38	4.5	3.4	6	3	1

Think threads with
YAMAWA

・ This product is different from JIS products in shape and dimensions, please be careful when using.

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

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
No.10-24UNC	2BX	3116104039	2.5P	70	9	24	39	6	4.9	8	3	1
No.10-32UNF	2BX	3116104041	2.5P	70	9	24	39	6	4.9	8	3	1
1/4-20UNC	2BX	3116104058	2.5P	80	11	30	42	7	5.5	8	3	1
1/4-28UNF	2BX	3116104062	2.5P	80	11	30	42	7	5.5	8	3	1

1

DIN

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

DIN

①-44

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

Z-PRO HVSP ZP

Z-PRO

Hybrid Value Spiral Fluted Taps for Zinc Plating



Specification



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	Thermal refined steels 調質鋼	Stainless steels ステンレス鋼	Cast steels 鋳鋼
3~12 (m/min)	3~12 (m/min)	3~12 (m/min)	3~12 (m/min)	~5 (m/min)	~5 (m/min)	3~12 (m/min)

25~35HRC

Product Features

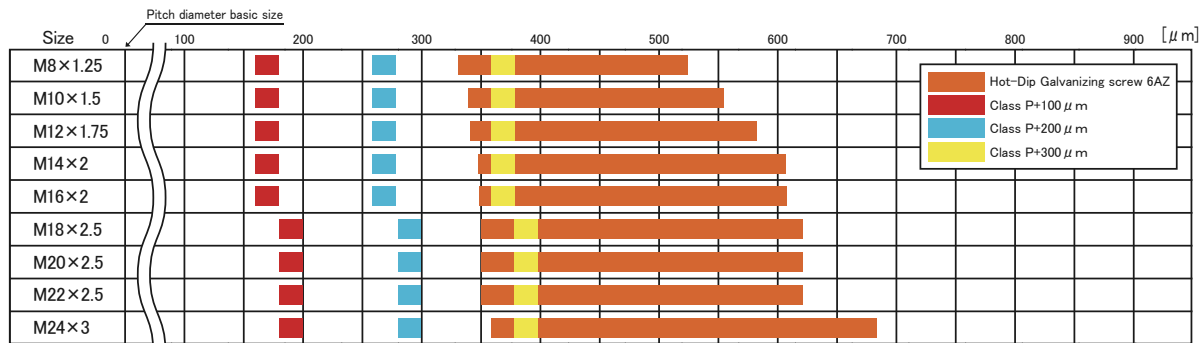
- We have a standard line-up of optimum tap classes for tapping internal threads before zinc plating.
- We have commercialized three types of oversize tap classes in great market demand for different purposes: +0.1 mm, +0.2 mm, and +0.3 mm.
- Specifications are based on HVSP (Hybrid Value Spiral Fluted Taps), so you can use them for various workpiece materials and machines.
- Stable tapping without chipping can be achieved in both vertical and horizontal tapping.

Uses of Products

HVSP ZP taps are used mainly for tapping internal threads before plating to prevent rust and corrosion on parts for roads, bridges, and other large buildings.

In zinc plating, HVSP ZP taps are used for tapping internal threads that have a large plating thickness.

Comparison Table of Pitch Diameter Tolerance Zones between taps' classes and internal thread classes (for Hot-Dip Galvanizing)



※M8 × 1.25 was calculated according to the formula for dimensional tolerances that will be the basis for the tolerance zone classes 6AZ specified in JIS B 0209-5.
 ・The above graph is an excerpt from JIS B 0209-5 "Limits of sizes for internal screw threads to mate with hot-dip galvanized external screw threads with maximum size of tolerance position h before galvanizing," which shows a pitch diameter comparison between the limits of sizes for internal threads of tolerance zone class 6AZ and the classes of tap HVSP ZP.
 ・For example, to satisfy the tolerance zone class 6AZ in the case of a nominal size of M10 × 1.5, this indicates that using class P+300 μm would be appropriate.
 ・Since the plating thickness varies with the plating type and method, the required internal thread diameter may deviate from the above standards. Therefore, for HVSP ZP, we have prepared standard options of class +100 μm (+0.1 mm), class P+200 μm (+0.2 mm), and class P+300 μm (+0.3 mm), which are in high demand in the market.

Reference Bored Hole Size Chart

In tapping before zinc plating, we recommend to make the bored hole size larger by the plating thickness.

Please use the following chart as a guide to determine the final bored hole size.

Size	Normally recommended bored hole size	Oversize bored hole size (reference)			Internal thread Class 6H Min. minor diameter
		Oversize+0.1mm	Oversize+0.2mm	Oversize+0.3mm	
M8 × 1.25	6.85	6.95	7.05	7.15	6.647
M10 × 1.5	8.60	8.70	8.80	8.90	8.376
M12 × 1.75	10.4	10.5	10.6	10.7	10.106
M14 × 2	12.1	12.2	12.3	12.4	11.835
M16 × 2	14.1	14.2	14.3	14.4	13.835
M18 × 2.5	15.6	15.7	15.8	15.9	15.294
M20 × 2.5	17.6	17.7	17.8	17.9	17.294
M22 × 2.5	19.6	19.7	19.8	19.9	19.294
M24 × 3	21.1	21.2	21.3	21.4	20.752

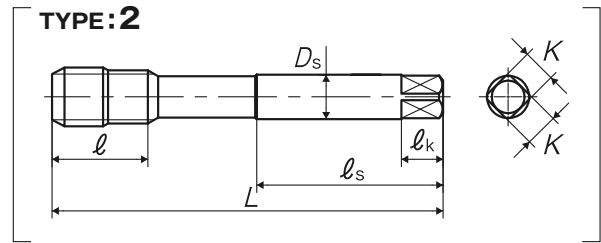
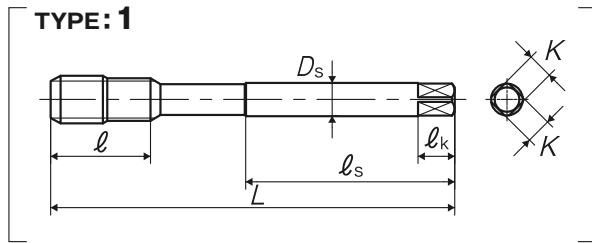
unit: mm

JIS

①-45

Think threads with
YAMAWA

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



Segment : 1C

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M8 × 1.25	P4+0.1	1112201064	C (2.5P)	90	19	-	46	6.2	5	8	3	1	¥ 3,110
M8 × 1.25	P4+0.2	1112301064	C (2.5P)	90	19	-	46	6.2	5	8	3	1	¥ 3,110
M8 × 1.25	P4+0.3	1112401064	C (2.5P)	90	19	-	46	6.2	5	8	3	1	¥ 3,110
M10 × 1.5	P4+0.1	1112201078	C (2.5P)	100	23	-	51	7	5.5	8	3	1	¥ 4,070
M10 × 1.5	P4+0.2	1112301078	C (2.5P)	100	23	-	51	7	5.5	8	3	1	¥ 4,070
M10 × 1.5	P4+0.3	1112401078	C (2.5P)	100	23	-	51	7	5.5	8	3	1	¥ 4,070
M12 × 1.75	P4+0.1	1112201088	C (2.5P)	110	26	-	56	8.5	6.5	9	3	1	¥ 5,460
M12 × 1.75	P4+0.2	1112301088	C (2.5P)	110	26	-	56	8.5	6.5	9	3	1	¥ 5,460
M12 × 1.75	P4+0.3	1112401088	C (2.5P)	110	26	-	56	8.5	6.5	9	3	1	¥ 5,460
M14 × 2	P4+0.1	1112201100	C (2.5P)	110	26	-	56	10.5	8	11	3	1	¥ 7,480
M14 × 2	P4+0.2	1112301100	C (2.5P)	110	26	-	56	10.5	8	11	3	1	¥ 7,480
M14 × 2	P4+0.3	1112401100	C (2.5P)	110	26	-	56	10.5	8	11	3	1	¥ 7,480
M16 × 2	P4+0.1	1112201114	C (2.5P)	110	26	-	56	12.5	10	13	3	1	¥ 9,970
M16 × 2	P4+0.2	1112301114	C (2.5P)	110	26	-	56	12.5	10	13	3	1	¥ 9,970
M16 × 2	P4+0.3	1112401114	C (2.5P)	110	26	-	56	12.5	10	13	3	1	¥ 9,970
M18 × 2.5	P5+0.1	1112201128	C (2.5P)	125	33	-	64	14	11	14	4	1	¥ 13,400
M18 × 2.5	P5+0.2	1112301128	C (2.5P)	125	33	-	64	14	11	14	4	1	¥ 13,400
M18 × 2.5	P5+0.3	1112401128	C (2.5P)	125	33	-	64	14	11	14	4	1	¥ 13,400
M20 × 2.5	P5+0.1	1112201141	C (2.5P)	140	33	-	71	15	12	15	4	2	¥ 18,200
M20 × 2.5	P5+0.2	1112301141	C (2.5P)	140	33	-	71	15	12	15	4	2	¥ 18,200
M20 × 2.5	P5+0.3	1112401141	C (2.5P)	140	33	-	71	15	12	15	4	2	¥ 18,200
M22 × 2.5	P5+0.1	1112201156	C (2.5P)	140	33	-	71	17	13	16	4	2	¥ 23,000
M22 × 2.5	P5+0.2	1112301156	C (2.5P)	140	33	-	71	17	13	16	4	2	¥ 23,000
M22 × 2.5	P5+0.3	1112401156	C (2.5P)	140	33	-	71	17	13	16	4	2	¥ 23,000
M24 × 3	P5+0.1	1112201167	C (2.5P)	160	37	-	82	19	15	18	4	2	¥ 28,700
M24 × 3	P5+0.2	1112301167	C (2.5P)	160	37	-	82	19	15	18	4	2	¥ 28,700
M24 × 3	P5+0.3	1112401167	C (2.5P)	160	37	-	82	19	15	18	4	2	¥ 28,700
M27 × 3	P5+0.1	1112201186	C (2.5P)	160	37	-	82	20	15	18	4	2	¥ 40,700
M27 × 3	P5+0.2	1112301186	C (2.5P)	160	37	-	82	20	15	18	4	2	¥ 40,700
M27 × 3	P5+0.3	1112401186	C (2.5P)	160	37	-	82	20	15	18	4	2	¥ 40,700
M30 × 3.5	P6+0.1	1112201199	C (2.5P)	180	44	-	92	23	17	20	4	2	¥ 51,600
M30 × 3.5	P6+0.2	1112301199	C (2.5P)	180	44	-	92	23	17	20	4	2	¥ 51,600
M30 × 3.5	P6+0.3	1112401199	C (2.5P)	180	44	-	92	23	17	20	4	2	¥ 51,600
M33 × 3.5	P6+0.1	1112201211	C (2.5P)	180	46	-	92	25	19	22	4	2	¥ 60,100
M33 × 3.5	P6+0.2	1112301211	C (2.5P)	180	46	-	92	25	19	22	4	2	¥ 60,100
M33 × 3.5	P6+0.3	1112401211	C (2.5P)	180	46	-	92	25	19	22	4	2	¥ 60,100
M36 × 4	P6+0.1	1112201225	C (2.5P)	200	52	-	102	28	21	24	4	2	¥ 69,300
M36 × 4	P6+0.2	1112301225	C (2.5P)	200	52	-	102	28	21	24	4	2	¥ 69,300
M36 × 4	P6+0.3	1112401225	C (2.5P)	200	52	-	102	28	21	24	4	2	¥ 69,300

1

JIS

Spiral Fluted Taps
(for blind hole) ①

Spiral Fluted Taps
(for through hole) ②

Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫

JIS

①-46

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-47



Z-PRO MHSP

Z-PRO

Spiral Fluted Taps for Carbon Steels of Medium hardness



Specification



Tapping Speeds depending on Materials

High carbon steels 高炭素鋼	Alloy steels 合金鋼	Thermal refined steels 調質鋼
5~20 (m/min)	5~20 (m/min)	5~15 (m/min)
25~35HRC		

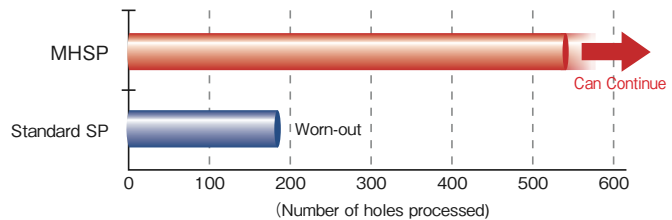
Product Features

- Ideal for forged products and tempered materials like S48C to S55C at 25 to 35HRC.
- Utilizing a unique high speed steel material and a special coating has created an excellent wear resistance with longer tool life.
- The special threaded portion design makes it effective against flute chipping at the full thread portion of the tap.
- This new design helps reduce tapping torque and frictional resistance to maintain the screw thread guide properties.
- The new design allows for a longer tool projection to accommodate the discharge of the chips and prevents them from being entangled with the holder.

Tapping Data

Tapping conditions [M8×1.25]

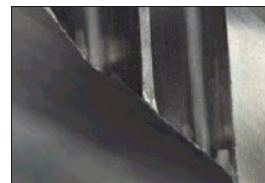
Workpiece Material	SCM440 35HRC
Tapping Length	12mm
Tapping Speed	15m/min
Machine	Machining center (Vertical)
Tapping Fluid	Water soluble cutting fluid



Compatible with a wide range of workpiece machining.

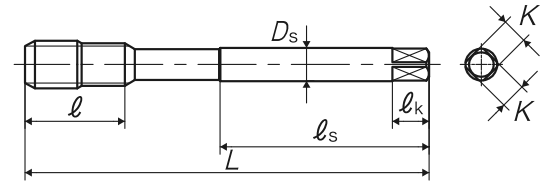
Workpiece Material	Target Tapping Speed (m/min)
High Carbon Steel/Alloy Steel S50C/SCM440 35HRC	5 ~ 15
High Carbon Steel/Alloy Steel S50C/SCM440 25HRC	5 ~ 20
High Carbon Steel/Alloy Steel S50C/SCM440 raw material	5 ~ 30

MHSP Microphotography after Tapped 550 Holes



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

TYPE: 1



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	MSRP
For Metric Threads													
M8 × 1.25	P4	SY8.0NSOCLJ	C (2.5P)	90	19	-	46	6.2	5	8	3	1	¥ 4,960
M10 × 1.5	P4	SY010SOCLJ	C (2.5P)	100	23	-	51	7	5.5	8	3	1	¥ 5,740
M10 × 1.25	P4	SY010NSOCLJ	C (2.5P)	100	23	-	51	7	5.5	8	3	1	¥ 5,740
M10 × 1	P4	SY010MSOCLJ	C (2.5P)	100	23	-	51	7	5.5	8	3	1	¥ 6,820
M12 × 1.75	P4	SY012PSOCLJ	C (2.5P)	110	26	-	56	8.5	6.5	9	4	1	¥ 8,230
M12 × 1.5	P4	SY012SOCLJ	C (2.5P)	110	26	-	56	8.5	6.5	9	4	1	¥ 8,230
M12 × 1.25	P4	SY012NSOCLJ	C (2.5P)	110	26	-	56	8.5	6.5	9	4	1	¥ 8,230
M14 × 2	P5	SY014QTOCLJ	C (2.5P)	110	26	-	56	10.5	8	11	4	1	¥ 11,500
M14 × 1.5	P4	SY014SOCLJ	C (2.5P)	110	26	-	56	10.5	8	11	4	1	¥ 11,500
M16 × 2	P5	SY016QTOCLJ	C (2.5P)	110	26	-	56	12.5	10	13	4	1	¥ 14,900
M16 × 1.5	P4	SY016SOCLJ	C (2.5P)	110	26	-	56	12.5	10	13	4	1	¥ 14,900

1

JIS

Spiral Fluted Taps
(for blind hole)

1

Spiral Fluted Taps
(for through hole)

2

Spiral Pointed Taps
(for through hole)

3

Hand Taps

4

Cemented
Carbide Taps

5

Roll Taps

6

Special Thread Taps
Simple Inspection Tools

7

Pipe Taps

8

Thread Mills
Premium Thread Mills

9

Dies

10

Center Drills
Centering Tools

11

Precision Machinery/
Medical Surgical Instruments

12

JIS

1-48

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-49



Z-PRO
MHSP

Z-PRO

Spiral Fluted Taps for Carbon Steels of Medium hardness



Specification

HSS-Co

Coating



Synchro nized

<2D

- Most suitable for forgings from S48C to S55C and thermal refined materials (25 to 35 HRC)
- Long life is achieved by the adoption of HSS material and special coating for wear resistance.

Tapping Speeds depending on Materials

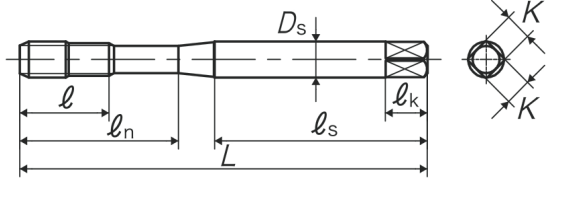
High carbon steels
高炭素鋼
5~20
(m/min)

Alloy steels
合金鋼
5~20
(m/min)

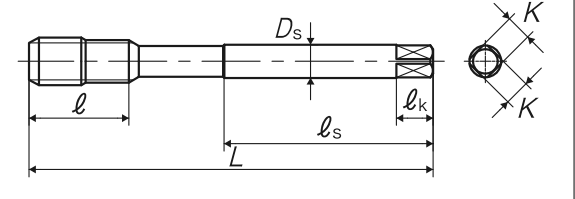
Thermal refined steels
調質鋼
5~15
(m/min)

25~35HRC

TYPE:1



TYPE:2



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
For Metric Threads												
M8 × 1.25	ISO2X	SD8.0NBOCLJ	2.5P	90	19	35	47	8	6.2	9	3	1
M10 × 1.5	ISO2X	SD010OBOCLJ	2.5P	100	23	39	52.5	10	8	11	3	1
M10 × 1.25	ISO2X	SM010NBOCLJ	2.5P	100	23	-	51	7	5.5	8	3	2
M10 × 1	ISO2X	SM010MBOCLJ	2.5P	90	19	-	46	7	5.5	8	3	2
M12 × 1.75	ISO2X	SG012PBOCLJ	2.5P	110	26	-	56	9	7	10	4	2
M12 × 1.5	ISO2X	SM012OBOCLJ	2.5P	100	21	-	51	9	7	10	4	2
M12 × 1.25	ISO2X	SM012NBOCLJ	2.5P	100	21	-	51	9	7	10	4	2
M14 × 2	ISO2X	SG014QBOCLJ	2.5P	110	26	-	56	11	9	12	4	2
M14 × 1.5	ISO2X	SM014OBOCLJ	2.5P	100	21	-	51	11	9	12	4	2
M16 × 2	ISO2X	SG016QBOCLJ	2.5P	110	26	-	56	12	9	12	4	2
M16 × 1.5	ISO2X	SM016OBOCLJ	2.5P	100	21	-	51	12	9	12	4	2

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

M E M O

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-51

S

SP

Spiral Fluted Taps

Specification



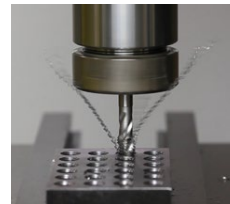
Tapping Speeds depending on Materials

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



Product Features

- The spiral flutes of the SP tap pull the small continuous curly chips back towards the tapping chuck and prevents chips from clogging in the hole. These taps are ideal for blind hole tapping.
- These taps cut easily into softer materials.
- Intermittent cutting into pilot holes with a keyway or grooves is possible.
- The flute strength is inferior to the HT tap. The HT flute shape is more suitable for high hardness materials.



Chip evacuation with a SP tap.

The difference between a SP tap and a + SP tap

SP

For low speed machining on drilling machines and machining centers.

Standard tap series SP (for blind holes).

Old name	New Name	Size Range
N-SP	SP	M1.2 ~ M64

Effective tapping on drill machines.

+SP

Medium speed machining/Synchronous feed tapping is recommended on Machining Centers.

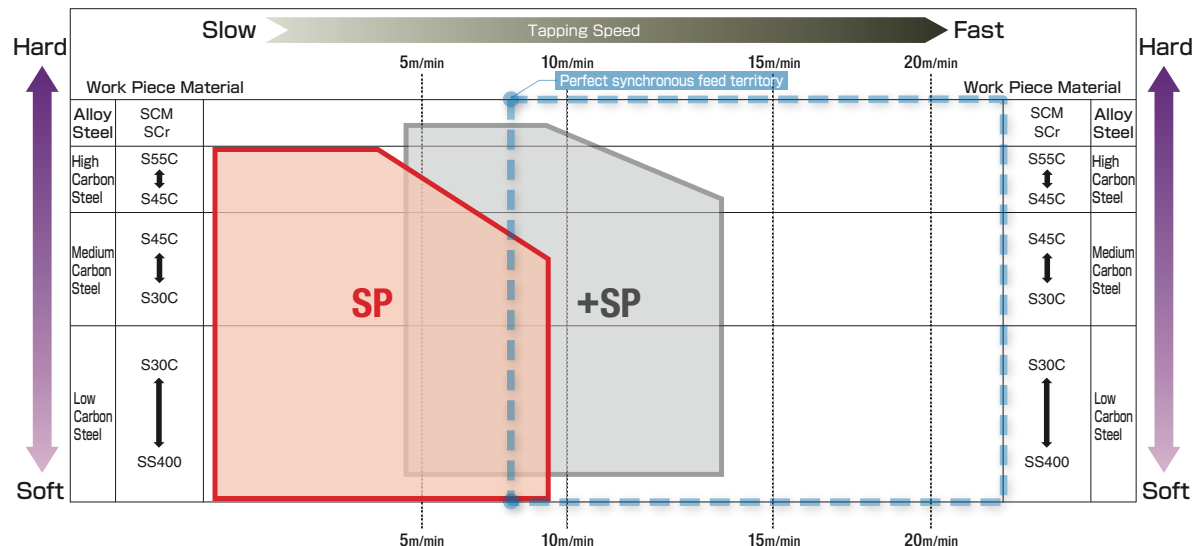
Plus series + SP for blind holes.

Old Name	New Name	Size Range
N+SP	+SP	M2 ~ M12

Effective for use with synchronous feed (rigid) tapping on CNC machining centers.

* Both are general purpose spiral flute taps developed for varying tapping environments.

Speed chart



Tapping speed range by tap series.

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

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

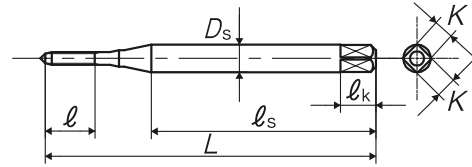
Precision Machinery/
Medical Surgical Instruments

⑫

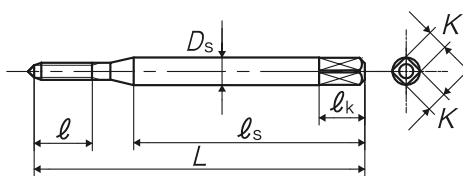
JIS

①-52

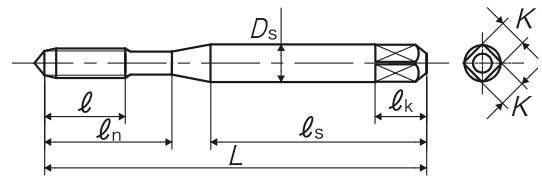
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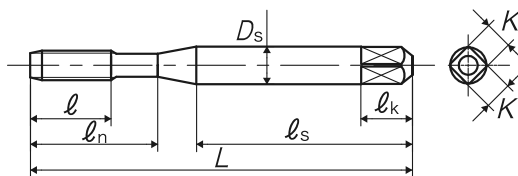
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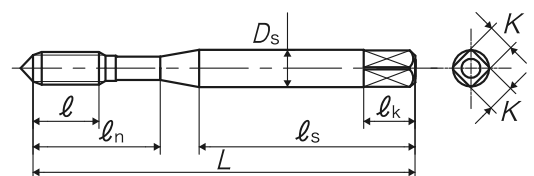
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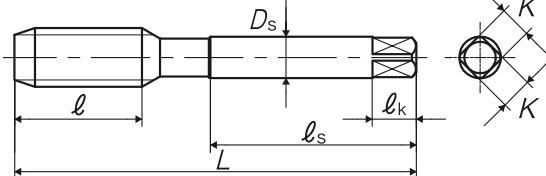
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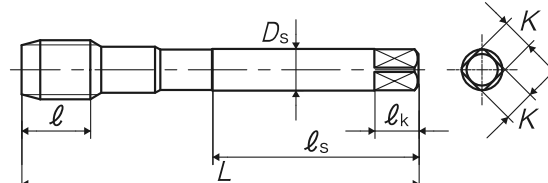
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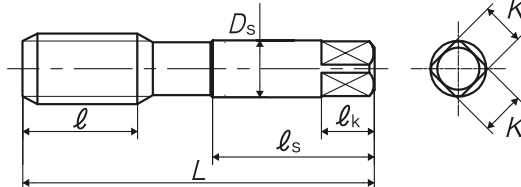
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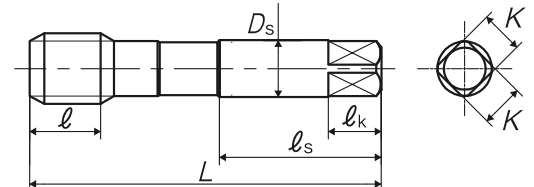
TYPE: 7



TYPE: 8



TYPE: 9



① Spiral Fluted Tap Series for blind hole

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

JIS

SP Spiral Fluted Taps

Segment : 1C

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M1.2 × 0.25	P1	SPP1.2B	2.5P	36	4.5	-	24	3	2.5	5	2	1	¥ 4,300
M1.4 × 0.3	P1	SPP1.4C	2.5P	36	5.4	-	24	3	2.5	5	2	1	¥ 3,520
M1.6 × 0.35	P1	SPP1.6D	2.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,360
M1.7 × 0.35	P1	SPP1.7D	2.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,360
M1.7 × 0.35	P2	SPQ1.7D	2.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,360
M1.7 × 0.35	P3	SPR1.7D	2.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,360 ※
M1.8 × 0.35	P1	SPP1.8D	2.5P	42	6.3	-	27	3	2.5	5	2	2	¥ 3,360 ※
M2 × 0.4	P1	SPP2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,530
M2 × 0.4	P2	SPQ2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,680
M2 × 0.4	P3	SPR2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,680
M2 × 0.4	P4	SPS2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,680 ※
M2 × 0.25	P1	SPP2.0B	2.5P	42	4.5	12	27	3	2.5	5	2	5	¥ 4,110
M2.2 × 0.45	P1	SPP2.2F	2.5P	42	8.1	12	27	3	2.5	5	2	3	¥ 2,440
M2.2 × 0.45	P3	SPR2.2F	2.5P	42	8.1	12	27	3	2.5	5	2	3	¥ 2,440 ※
M2.3 × 0.4	P1	SPP2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,440
M2.3 × 0.4	P2	SPQ2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,440 ※
M2.3 × 0.4	P3	SPR2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,440 ※
M2.3 × 0.4	P4	SPS2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,440 ※
M2.3 × 0.25	P1	SPP2.3B	2.5P	42	4.5	12	27	3	2.5	5	2	5	¥ 4,110 ※
M2.5 × 0.45	P1	SPP2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,060
M2.5 × 0.45	P2	SPQ2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,060
M2.5 × 0.45	P3	SPR2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,060
M2.5 × 0.45	P4	SPS2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,060
M2.5 × 0.35	P1	SPP2.5D	2.5P	46	6.3	14	29	3	2.5	5	2	5	¥ 3,030
M2.6 × 0.45	P1	SPP2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,060
M2.6 × 0.45	P2	SPQ2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,060
M2.6 × 0.45	P3	SPR2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,060
M2.6 × 0.45	P4	SPS2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,060 ※
M2.6 × 0.35	P1	SPP2.6D	2.5P	46	6.3	14	29	3	2.5	5	2	5	¥ 3,030 ※
M3 × 0.5	P1	SPP3.0G	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,360
M3 × 0.5	P2	SPQ3.0G	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,360
M3 × 0.5	P3	SPR3.0G	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,360
M3 × 0.5	P4	SPS3.0G	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,360
3M0.6	P1	SPP3.0H	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,440 ※
M3 × 0.35	P1	SPP3.0D	2.5P	46	6.5	14	26	4	3.2	6	3	5	¥ 2,460
M3.5 × 0.6	P1	SPP3.5H	2.5P	52	11	16	29	5	4	7	3	3	¥ 1,440
M3.5 × 0.6	P2	SPQ3.5H	2.5P	52	11	16	29	5	4	7	3	3	¥ 1,440 ※
M3.5 × 0.6	P3	SPR3.5H	2.5P	52	11	16	29	5	4	7	3	3	¥ 1,440 ※
M3.5 × 0.6	P4	SPS3.5H	2.5P	52	11	16	29	5	4	7	3	3	¥ 1,440 ※
M3.5 × 0.35	P1	SPP3.5D	2.5P	52	6.5	16	29	5	4	7	3	5	¥ 2,460 ※
M4 × 0.7	P2	SPQ4.0I	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,360
M4 × 0.7	P3	SPR4.0I	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,360
M4 × 0.7	P4	SPS4.0I	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,360
4M0.75	P2	SPQ4.0J	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,440
M4 × 0.5	P1	SPP4.0G	2.5P	52	9	17	29	5	4	7	3	5	¥ 2,110
M4.5 × 0.75	P2	SPQ4.5J	2.5P	60	13	21	33	5.5	4.5	7	3	3	¥ 1,450 ※
M4.5 × 0.5	P1	SPP4.5G	2.5P	60	9	21	33	5.5	4.5	7	3	5	¥ 2,110 ※
M5 × 0.8	P2	SPQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,370

JIS

Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	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	MSRP
M5 × 0.8	P3	SPR5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,370
M5 × 0.8	P4	SPS5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,370
5M0.9	P2	SPQ5.0L	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,450 ※
M5 × 0.75	P2	SPQ5.0J	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 2,110 ※
M5 × 0.5	P1	SPP5.0G	2.5P	60	9	22	33	5.5	4.5	7	3	5	¥ 2,110
M5.5 × 0.9	P2	SPQ5.5L	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,600 ※
M5.5 × 0.5	P1	SPP5.5G	2.5P	62	9	26	33	6	4.5	7	3	5	¥ 2,250 ※
M6 × 1	P2	SPQ6.0M	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,510
M6 × 1	P2	SPQ6.0M-T	2.5P	62	15	26	33	6	4.5	7	3	4	¥ 1,510
M6 × 1	P3	SPR6.0M	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,510
M6 × 1	P4	SPS6.0M	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,510
M6 × 0.75	P2	SPQ6.0J	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,250
M6 × 0.75	P3	SPR6.0J	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,250 ※
M6 × 0.75	P4	SPS6.0J	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,250 ※
M6 × 0.5	P1	SPP6.0G	2.5P	62	9	26	33	6	4.5	7	3	5	¥ 2,250
M6 × 0.5	P2	SPQ6.0G	2.5P	62	9	26	33	6	4.5	7	3	5	¥ 2,250 ※
M6 × 0.5	P3	SPR6.0G	2.5P	62	9	26	33	6	4.5	7	3	5	¥ 2,250 ※
M7 × 1	P2	SPQ7.0M	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 1,940
M7 × 1	P3	SPR7.0M	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 1,940 ※
M7 × 1	P4	SPS7.0M	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 1,940 ※
M7 × 0.75	P2	SPQ7.0J	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 2,870
M7 × 0.5	P2	SPQ7.0G	2.5P	70	10	-	36	6.2	5	8	3	7	¥ 3,580 ※
M8 × 1.25	P2	SPQ8.0N	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 2,100
M8 × 1.25	P3	SPR8.0N	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 2,230
M8 × 1.25	P4	SPS8.0N	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 2,230
M8 × 1	P2	SPQ8.0M	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 2,530
M8 × 1	P3	SPR8.0M	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 2,530 ※
M8 × 1	P4	SPS8.0M	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 2,530 ※
M8 × 0.75	P2	SPQ8.0J	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 2,870
M8 × 0.75	P3	SPR8.0J	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 2,870 ※
M8 × 0.5	P2	SPQ8.0G	2.5P	70	10	-	36	6.2	5	8	3	7	¥ 3,580
M9 × 1.25	P2	SPQ9.0N	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 2,840 ※
M9 × 1	P2	SPQ9.0M	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 3,370
M9 × 0.75	P2	SPQ9.0J	2.5P	75	13	-	38	7	5.5	8	3	7	¥ 4,100
M9 × 0.5	P2	SPQ9.0G	2.5P	75	11	-	38	7	5.5	8	3	7	¥ 4,460 ※
M10 × 1.5	P2	SPQ010O	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 2,670
M10 × 1.5	P3	SPR010O	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 2,840
M10 × 1.5	P4	SPS010O	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 2,840
M10 × 1.25	P2	SPQ010N	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 2,670
M10 × 1.25	P3	SPR010N	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 2,840
M10 × 1.25	P4	SPS010N	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 2,840
M10 × 1	P2	SPQ010M	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 3,370
M10 × 1	P3	SPR010M	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 3,370 ※
M10 × 1	P4	SPS010M	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 3,370 ※
M10 × 0.75	P2	SPQ010J	2.5P	75	13	-	38	7	5.5	8	3	7	¥ 4,100
M10 × 0.5	P2	SPQ010G	2.5P	75	11	-	38	7	5.5	8	3	7	¥ 4,460 ※
M11 × 1.5	P2	SPQ011O	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,020 ※
M11 × 1.25	P2	SPQ011N	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,020 ※
M11 × 1	P2	SPQ011M	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,730 ※
M11 × 0.75	P2	SPQ011J	2.5P	82	14	-	42	8.5	6.5	9	3	7	¥ 6,030 ※
M12 × 1.75	P2	SPQ012P	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 3,780

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

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JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-54

① Spiral Fluted Tap Series for blind hole

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

JIS

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	MSRP
M12 × 1.75	P3	SPR012P	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,020
M12 × 1.75	P4	SPS012P	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,020
M12 × 1.5	P2	SPQ012O	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 3,780
M12 × 1.5	P3	SPR012O	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,020 ※
M12 × 1.5	P4	SPS012O	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,020 ※
M12 × 1.25	P2	SPQ012N	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 3,780
M12 × 1.25	P3	SPR012N	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,020
M12 × 1.25	P4	SPS012N	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,020 ※
M12 × 1	P2	SPQ012M	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,730
M12 × 1	P3	SPR012M	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,730 ※
M12 × 1	P4	SPS012M	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,730 ※
M12 × 0.75	P2	SPQ012J	2.5P	82	14	-	42	8.5	6.5	9	3	7	¥ 6,030 ※
M12 × 0.5	P2	SPQ012G	2.5P	82	12	-	42	8.5	6.5	9	3	7	¥ 6,030 ※
M13 × 1.75	P2	SPQ013P	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 6,360 ※
M13 × 1.5	P2	SPQ013O	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 6,360 ※
M13 × 1.25	P2	SPQ013N	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 6,360 ※
M13 × 1	P2	SPQ013M	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 6,360 ※
M14 × 2	P2	SPQ014Q	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 5,480
M14 × 2	P3	SPR014Q	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 5,480 ※
M14 × 2	P4	SPS014Q	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 5,480 ※
M14 × 1.5	P2	SPQ014O	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 5,480
M14 × 1.5	P3	SPR014O	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 5,480 ※
M14 × 1.5	P4	SPS014O	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 5,480
M14 × 1.25	P2	SPQ014N	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 6,360
M14 × 1	P2	SPQ014M	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 6,360
M15 × 2	P2	SPQ015Q	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320 ※
M15 × 1.5	P2	SPQ015O	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320 ※
M15 × 1	P2	SPQ015M	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 8,730 ※
M16 × 2	P2	SPQ016Q	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 6,890
M16 × 2	P3	SPR016Q	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320
M16 × 2	P4	SPS016Q	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320
M16 × 2	P5	SPT016Q	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320 ※
M16 × 1.5	P2	SPQ016O	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 6,890
M16 × 1.5	P3	SPR016O	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320 ※
M16 × 1.5	P4	SPS016O	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320
M16 × 1.5	P5	SPT016O	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320 ※
M16 × 1.25	P2	SPQ016N	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 8,730 ※
M16 × 1	P2	SPQ016M	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 8,730
M17 × 2	P2	SPQ017Q	2.5P	100	33	-	51	14	11	14	4	6	¥ 9,780 ※
M17 × 1.5	P2	SPQ017O	2.5P	100	33	-	51	14	11	14	4	6	¥ 9,780 ※
M17 × 1	P2	SPQ017M	2.5P	100	18	-	51	14	11	14	4	7	¥ 12,700 ※
M18 × 2.5	P3	SPR018R	2.5P	100	33	-	51	14	11	14	4	6	¥ 9,780
M18 × 2.5	P4	SPS018R	2.5P	100	33	-	51	14	11	14	4	6	¥ 9,780 ※
M18 × 2	P3	SPR018Q	2.5P	100	33	-	51	14	11	14	4	6	¥ 9,780 ※
M18 × 1.5	P2	SPQ018O	2.5P	100	33	-	51	14	11	14	4	6	¥ 9,780
M18 × 1.5	P3	SPR018O	2.5P	100	33	-	51	14	11	14	4	6	¥ 9,780 ※
M18 × 1.5	P4	SPS018O	2.5P	100	33	-	51	14	11	14	4	6	¥ 9,780 ※
M18 × 1.25	P2	SPQ018N	2.5P	100	33	-	51	14	11	14	4	6	¥ 12,700 ※
M18 × 1	P2	SPQ018M	2.5P	100	18	-	51	14	11	14	4	7	¥ 12,700
M19 × 1.5	P3	SPR019O	2.5P	105	33	-	50	15	12	15	4	8	¥ 13,400 ※

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①-55

Think threads with
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※ = Specified Distribution Items. Made to order products.

Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	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	MSRP
M19 × 1	P2	SPQ019M	2.5P	105	18	-	50	15	12	15	4	9	¥ 17,000 ※
M20 × 2.5	P3	SPR020R	2.5P	105	33	-	50	15	12	15	4	8	¥ 12,600
M20 × 2.5	P4	SPS020R	2.5P	105	33	-	50	15	12	15	4	8	¥ 13,400
M20 × 2.5	P5	SPT020R	2.5P	105	33	-	50	15	12	15	4	8	¥ 13,400 ※
M20 × 2	P3	SPR020Q	2.5P	105	33	-	50	15	12	15	4	8	¥ 12,600
M20 × 1.5	P3	SPR020O	2.5P	105	33	-	50	15	12	15	4	8	¥ 12,600
M20 × 1.5	P4	SPS020O	2.5P	105	33	-	50	15	12	15	4	8	¥ 13,400 ※
M20 × 1.5	P5	SPT020O	2.5P	105	33	-	50	15	12	15	4	8	¥ 13,400 ※
M20 × 1.25	P2	SPQ020N	2.5P	105	18	-	50	15	12	15	4	9	¥ 17,000 ※
M20 × 1	P2	SPQ020M	2.5P	105	18	-	50	15	12	15	4	9	¥ 17,000
M22 × 2.5	P3	SPR022R	2.5P	115	33	-	55	17	13	16	4	8	¥ 17,100
M22 × 2.5	P4	SPS022R	2.5P	115	33	-	55	17	13	16	4	8	¥ 17,100 ※
M22 × 2.5	P5	SPT022R	2.5P	115	33	-	55	17	13	16	4	8	¥ 17,100 ※
M22 × 2	P3	SPR022Q	2.5P	115	33	-	55	17	13	16	4	8	¥ 17,100 ※
M22 × 1.5	P3	SPR022O	2.5P	115	33	-	55	17	13	16	4	8	¥ 17,100
M22 × 1.5	P4	SPS022O	2.5P	115	33	-	55	17	13	16	4	8	¥ 17,100 ※
M22 × 1.5	P5	SPT022O	2.5P	115	33	-	55	17	13	16	4	8	¥ 17,100 ※
M22 × 1	P2	SPQ022M	2.5P	115	19	-	55	17	13	16	4	9	¥ 22,100
M23 × 1.5	P3	SPR023O	2.5P	120	39	-	55	19	15	18	4	8	¥ 21,300 ※
M24 × 3	P3	SPR024S	2.5P	120	39	-	55	19	15	18	4	8	¥ 21,300
M24 × 3	P4	SPS024S	2.5P	120	39	-	55	19	15	18	4	8	¥ 21,300 ※
M24 × 3	P5	SPT024S	2.5P	120	39	-	55	19	15	18	4	8	¥ 21,300 ※
M24 × 2	P3	SPR024Q	2.5P	120	39	-	55	19	15	18	4	8	¥ 21,300
M24 × 1.5	P3	SPR024O	2.5P	120	39	-	55	19	15	18	4	8	¥ 21,300
M24 × 1.5	P4	SPS024O	2.5P	120	39	-	55	19	15	18	4	8	¥ 21,300 ※
M24 × 1	P2	SPQ024M	2.5P	120	19	-	55	19	15	18	4	9	¥ 27,200
M25 × 2	P3	SPR025Q	2.5P	125	39	-	58	19	15	18	4	8	¥ 27,800 ※
M25 × 1.5	P3	SPR025O	2.5P	125	39	-	58	19	15	18	4	8	¥ 27,800
M25 × 1	P2	SPQ025M	2.5P	125	20	-	58	19	15	18	4	9	¥ 32,900 ※
M26 × 3	P3	SPR026S	2.5P	130	39	-	60	20	15	18	4	8	¥ 29,900 ※
M26 × 2	P3	SPR026Q	2.5P	130	39	-	60	20	15	18	4	8	¥ 29,900 ※
M26 × 1.5	P3	SPR026O	2.5P	130	39	-	60	20	15	18	4	8	¥ 29,900
M26 × 1	P2	SPQ026M	2.5P	130	20	-	60	20	15	18	4	9	¥ 36,800 ※
M27 × 3	P3	SPR027S	2.5P	130	39	-	60	20	15	18	4	8	¥ 29,900
M27 × 2	P3	SPR027Q	2.5P	130	39	-	60	20	15	18	4	8	¥ 29,900
M27 × 1.5	P3	SPR027O	2.5P	130	39	-	60	20	15	18	4	8	¥ 29,900
M27 × 1	P2	SPQ027M	2.5P	130	20	-	60	20	15	18	4	9	¥ 36,800 ※
M28 × 2	P3	SPR028Q	2.5P	135	46	-	62	23	17	20	4	8	¥ 38,100
M28 × 1.5	P3	SPR028O	2.5P	135	46	-	62	23	17	20	4	8	¥ 38,100
M28 × 1	P2	SPQ028M	2.5P	135	20	-	62	23	17	20	4	9	¥ 47,600 ※
M30 × 3.5	P4	SPS030T	2.5P	135	46	-	62	23	17	20	4	8	¥ 38,100
M30 × 3	P3	SPR030S	2.5P	135	46	-	62	23	17	20	4	8	¥ 38,100
M30 × 2	P3	SPR030Q	2.5P	135	46	-	62	23	17	20	4	8	¥ 38,100
M30 × 1.5	P3	SPR030O	2.5P	135	46	-	62	23	17	20	4	8	¥ 38,100
M30 × 1	P2	SPQ030M	2.5P	135	21	-	62	23	17	20	4	9	¥ 47,600 ※
M32 × 3	P3	SPMR032S	2.5P	145	46	-	67	24	19	22	4	8	¥ 44,300 ※
M32 × 2	P3	SPMR032Q	2.5P	145	46	-	67	24	19	22	4	8	¥ 44,300 ※
M32 × 1.5	P3	SPMR032O	2.5P	145	46	-	67	24	19	22	4	8	¥ 44,300 ※
M32 × 1	P2	SPMQ032M	2.5P	145	21	-	67	24	19	22	4	9	¥ 54,600 ※
M33 × 3.5	P4	SPMS033T	2.5P	145	46	-	67	25	19	22	4	8	¥ 44,300

※ = Specified Distribution Items. Made to order products.

Think threads with
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Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

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Cemented
Carbide Taps

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Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-56

① Spiral Fluted Tap Series for blind hole

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

JIS

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	MSRP
M33 × 3	P3	SPMR033S	2.5P	145	46	-	67	25	19	22	4	8	¥ 44,300 ※
M33 × 2	P3	SPMR033Q	2.5P	145	46	-	67	25	19	22	4	8	¥ 44,300 ※
M33 × 1.5	P3	SPMR033O	2.5P	145	46	-	67	25	19	22	4	8	¥ 44,300 ※
M33 × 1	P2	SPMQ033M	2.5P	145	21	-	67	25	19	22	4	9	¥ 54,600 ※
M34 × 3	P3	SPMR034S	2.5P	155	52	-	71	28	21	24	4	8	¥ 51,300 ※
M34 × 2	P3	SPMR034Q	2.5P	155	52	-	71	28	21	24	4	8	¥ 51,300 ※
M34 × 1.5	P3	SPMR034O	2.5P	155	26	-	71	28	21	24	4	9	¥ 51,300 ※
M34 × 1	P2	SPMQ034M	2.5P	155	26	-	71	28	21	24	4	9	¥ 60,800 ※
M35 × 3	P3	SPMR035S	2.5P	155	52	-	71	28	21	24	4	8	¥ 51,300 ※
M35 × 2	P3	SPMR035Q	2.5P	155	52	-	71	28	21	24	4	8	¥ 51,300 ※
M35 × 1.5	P3	SPMR035O	2.5P	155	26	-	71	28	21	24	4	9	¥ 51,300 ※
M35 × 1	P2	SPMQ035M	2.5P	155	26	-	71	28	21	24	4	9	¥ 60,800 ※
M36 × 4	P4	SPMS036U	2.5P	155	52	-	71	28	21	24	4	8	¥ 51,300 ※
M36 × 3	P3	SPMR036S	2.5P	155	52	-	71	28	21	24	4	8	¥ 51,300 ※
M36 × 2	P3	SPMR036Q	2.5P	155	52	-	71	28	21	24	4	8	¥ 51,300 ※
M36 × 1.5	P3	SPMR036O	2.5P	155	26	-	71	28	21	24	4	9	¥ 51,300 ※
M36 × 1	P2	SPMQ036M	2.5P	155	26	-	71	28	21	24	4	9	¥ 60,800 ※
M38 × 3	P3	SPMR038S	2.5P	165	52	-	76	30	23	26	4	8	¥ 58,800 ※
M38 × 2	P3	SPMR038Q	2.5P	165	52	-	76	30	23	26	4	8	¥ 58,800 ※
M38 × 1.5	P3	SPMR038O	2.5P	165	26	-	76	30	23	26	4	9	¥ 58,800 ※
M39 × 4	P4	SPMS039U	2.5P	165	52	-	76	30	23	26	4	8	¥ 58,800 ※
M39 × 3	P3	SPMR039S	2.5P	165	52	-	76	30	23	26	4	8	¥ 58,800 ※
M39 × 2	P3	SPMR039Q	2.5P	165	52	-	76	30	23	26	4	8	¥ 58,800 ※
M39 × 1.5	P3	SPMR039O	2.5P	165	26	-	76	30	23	26	4	9	¥ 58,800 ※
M40 × 3	P3	SPMR040S	2.5P	175	59	-	81	32	26	30	4	8	¥ 71,500 ※
M40 × 2	P3	SPMR040Q	2.5P	175	59	-	81	32	26	30	4	8	¥ 71,500 ※
M40 × 1.5	P3	SPMR040O	2.5P	175	27	-	81	32	26	30	4	9	¥ 71,500 ※
M42 × 4.5	P4	SPMS042V	2.5P	175	59	-	81	32	26	30	4	8	¥ 71,500 ※
M42 × 3	P3	SPMR042S	2.5P	175	59	-	81	32	26	30	4	8	¥ 71,500 ※
M42 × 2	P3	SPMR042Q	2.5P	175	59	-	81	32	26	30	4	8	¥ 71,500 ※
M42 × 1.5	P3	SPMR042O	2.5P	175	27	-	81	32	26	30	4	9	¥ 71,500 ※
M45 × 4.5	P4	SPMS045V	2.5P	180	59	-	83	35	26	30	4	8	¥ 82,800 ※
M45 × 3	P3	SPMR045S	2.5P	180	59	-	83	35	26	30	4	8	¥ 82,800 ※
M45 × 2	P3	SPMR045Q	2.5P	180	59	-	83	35	26	30	4	8	¥ 82,800 ※
M45 × 1.5	P3	SPMR045O	2.5P	180	27	-	83	35	26	30	4	9	¥ 82,800 ※
M48 × 5	P4	SPMS048W	2.5P	185	65	-	85	38	29	32	4	8	¥ 104,000 ※
M48 × 4	P4	SPMS048U	2.5P	185	65	-	85	38	29	32	4	8	¥ 104,000 ※
M48 × 3	P3	SPMR048S	2.5P	185	65	-	85	38	29	32	4	8	¥ 104,000 ※
M48 × 2	P3	SPMR048Q	2.5P	185	65	-	85	38	29	32	4	8	¥ 104,000 ※
M48 × 1.5	P3	SPMR048O	2.5P	185	28	-	85	38	29	32	4	9	¥ 104,000 ※
M52 × 5	P4	SPS052W	2.5P	195	70	-	86	42	32	35	4	8	¥ 129,000 ※
M56 × 5.5	P4	SPS056X	2.5P	205	70	-	91	44	35	38	4	8	¥ 147,000 ※
M60 × 5.5	P4	SPS060X	2.5P	215	76	-	96	46	35	38	4	8	¥ 177,000 ※
M64 × 6	P4	SPS064Y	2.5P	225	79	-	100	48	38	42	4	8	¥ 210,000 ※
For Unified Threads													
No.1-64UNC	P1	SPPUN1D	2.5P	42	7.2	-	27	3	2.5	5	2	2	¥ 3,980 ※
No.2-56UNC	P1	SPPUN2E	2.5P	42	8.1	12	27	3	2.5	5	2	3	¥ 2,810 ※
No.2-64UNF	P1	SPPUN2D	2.5P	42	8.1	12	27	3	2.5	5	2	3	¥ 2,810 ※
No.3-48UNC	P1	SPPUN3F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,380 ※
No.3-56UNF	P1	SPPUN3E	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,380 ※

JIS

Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	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	MSRP
No.4-40UNC	P1	SPPUN4H	2.5P	46	9	14	25	4	3.2	6	2	3	¥ 1,820
No.4-48UNF	P1	SPPUN4F	2.5P	46	9	14	25	4	3.2	6	2	3	¥ 1,820 ※
No.5-40UNC	P1	SPPUN5H	2.5P	52	11	16	28	5	4	7	3	3	¥ 1,690
No.5-44UNF	P1	SPPUN5G	2.5P	52	11	16	28	5	4	7	3	3	¥ 1,690 ※
No.6-32UNC	P2	SPQUN6J	2.5P	52	11	17	27	5	4	7	3	3	¥ 1,690
No.6-40UNF	P1	SPPUN6H	2.5P	52	11	17	27	5	4	7	3	3	¥ 1,690 ※
No.8-32UNC	P2	SPQUN8J	2.5P	60	13	22	31	5.5	4.5	7	3	3	¥ 1,700
No.8-36UNF	P2	SPQUN8I	2.5P	60	13	22	31	5.5	4.5	7	3	3	¥ 1,700 ※
No.10-24UNC	P2	SPQUNAM	2.5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,700
No.10-32UNF	P2	SPQUNAJ	2.5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,700
No.12-24UNC	P2	SPQUNCM	2.5P	62	15	26	32	6	4.5	7	3	3	¥ 1,830 ※
No.12-28UNF	P2	SPQUNCK	2.5P	62	15	26	32	6	4.5	7	3	3	¥ 1,830 ※
1/4-20UNC	P2	SPQU04N	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,830
1/4-28UNF	P2	SPQU04K	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,830
1/4-32UNEF	P2	SPQU04J	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,710 ※
1/4-36UNS	P2	SPQU04I	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 3,150 ※
5/16-18UNC	P2	SPQU05O	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 2,570
5/16-24UNF	P2	SPQU05M	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 2,570
5/16-32UNEF	P2	SPQU05J	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 3,580 ※
3/8-16UNC	P2	SPQU06P	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 3,290
3/8-24UNF	P2	SPQU06M	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 3,290
3/8-32UNEF	P2	SPQU06J	2.5P	75	13	-	38	7	5.5	8	3	7	¥ 4,100 ※
7/16-14UNC	P3	SPRU07Q	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,630
7/16-20UNF	P2	SPQU07N	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,630
7/16-28UNEF	P2	SPQU07K	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 6,030 ※
1/2-13UNC	P3	SPRU08R	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 4,910
1/2-20UNF	P2	SPQU08N	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 4,910
1/2-28UNEF	P2	SPQU08K	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 7,240 ※
9/16-12UNC	P3	SPRU09S	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320 ※
9/16-18UNF	P2	SPQU09O	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320
9/16-24UNEF	P2	SPQU09M	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 10,500 ※
5/8-11UNC	P3	SPRU10U	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320
5/8-18UNF	P2	SPQU10O	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320
5/8-24UNEF	P2	SPQU10M	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 10,500 ※
3/4-10UNC	P3	SPRU12V	2.5P	105	33	-	50	15	12	15	4	8	¥ 13,400
3/4-16UNF	P3	SPRU12P	2.5P	105	33	-	50	15	12	15	4	8	¥ 13,400
3/4-20UNEF	P2	SPQU12N	2.5P	105	33	-	50	15	12	15	4	8	¥ 17,000 ※
7/8-9UNC	P3	SPRU14W	2.5P	115	33	-	55	17	13	16	4	8	¥ 18,800
7/8-14UNF	P3	SPRU14Q	2.5P	115	33	-	55	17	13	16	4	8	¥ 18,800
7/8-20UNEF	P2	SPQU14N	2.5P	115	33	-	55	17	13	16	4	8	¥ 26,400 ※
1 -8UNC	P3	SPRU16X	2.5P	125	39	-	58	19	15	18	4	8	¥ 27,800
1 -12UNF	P3	SPRU16S	2.5P	125	39	-	58	19	15	18	4	8	¥ 27,800 ※
1 -14UNS	P3	SPRU16Q	2.5P	125	39	-	58	19	15	18	4	8	¥ 36,800 ※
1 -20UNEF	P2	SPQU16N	2.5P	125	39	-	58	19	15	18	4	8	¥ 36,800 ※
1 1/8-7UNC	P4	SPSU18Y	2.5P	135	46	-	62	23	17	20	4	8	¥ 38,100 ※
1 1/8-8UN	P3	SPRU18X	2.5P	135	46	-	62	23	17	20	4	8	¥ 45,600 ※
1 1/8-12UNF	P3	SPRU18S	2.5P	135	46	-	62	23	17	20	4	8	¥ 38,100 ※
1 1/8-14UNS	P3	SPRU18Q	2.5P	135	46	-	62	23	17	20	4	8	¥ 45,600 ※
1 1/4-7UNC	P4	SPMSU20Y	2.5P	145	46	-	67	24	19	22	4	8	¥ 44,300 ※
1 1/4-8UN	P3	SPMRU20X	2.5P	145	46	-	67	24	19	22	4	8	¥ 53,100 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-58

① Spiral Fluted Tap Series for blind hole

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

JIS

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	MSRP
1 1/4-12UNF	P3	SPMRU20S	2.5P	145	46	-	67	24	19	22	4	8	¥ 44,300 ※
1 3/8-6UNC	P4	SPMSU22Z	2.5P	155	52	-	71	28	21	24	4	8	¥ 51,300 ※
1 3/8-8UN	P3	SPMRU22X	2.5P	155	52	-	71	28	21	24	4	8	¥ 61,500 ※
1 3/8-12UNF	P3	SPMRU22S	2.5P	155	52	-	71	28	21	24	4	8	¥ 51,300 ※
1 1/2-6UNC	P4	SPMSU24Z	2.5P	165	52	-	76	30	23	26	4	8	¥ 73,400 ※
1 1/2-8UN	P3	SPMRU24X	2.5P	165	52	-	76	30	23	26	4	8	¥ 73,400 ※
1 1/2-12UNF	P3	SPMRU24S	2.5P	165	52	-	76	30	23	26	4	8	¥ 73,400 ※
1 3/4-5UNC	P4	SPMSU280	2.5P	180	59	-	83	35	26	30	4	8	¥ 97,000 ※
1 3/4-12UN	P3	SPMRU28S	2.5P	180	59	-	83	35	26	30	4	8	¥ 97,000 ※
2 -4 1/2UNC	P5	SPTU329	2.5P	195	70	-	85	40	32	35	4	8	¥ 138,000 ※
2 -8UN	P4	SPSU32X	2.5P	195	70	-	85	40	32	35	4	8	¥ 138,000 ※
2 -12UN	P3	SPRU32S	2.5P	145	45	-	82	40	32	35	4	8	¥ 138,000 ※
For Whitworth Threads													
1/8W40	P1	SPPW02H	2.5P	52	11	16	28	5	4	7	3	3	¥ 2,100
5/32W32	P2	SPQW2HJ	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,690 ※
3/16W24	P2	SPQW03M	2.5P	60	13	21	32	5.5	4.5	7	3	3	¥ 1,700
7/32W24	P2	SPQW3HM	2.5P	62	15	26	32	6	4.5	7	3	3	¥ 1,830 ※
1/4W20	P2	SPQW04N	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,830
5/16W18	P2	SPQW05O	2.5P	70	19	-	36	6.2	5	8	3	6	¥ 2,570
3/8W16	P2	SPQW06P	2.5P	75	23	-	38	7	5.5	8	3	6	¥ 3,290
7/16W14	P3	SPRW07Q	2.5P	82	26	-	42	8.5	6.5	9	3	6	¥ 4,630 ※
1/2W12	P3	SPRW08S	2.5P	88	26	-	45	10.5	8	11	3	6	¥ 4,910
9/16W12	P3	SPRW09S	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320 ※
5/8W11	P3	SPRW10U	2.5P	95	26	-	48	12.5	10	13	3	6	¥ 7,320
3/4W10	P3	SPRW12V	2.5P	105	33	-	50	15	12	15	4	8	¥ 13,400
7/8W9	P3	SPRW14W	2.5P	115	33	-	55	17	13	16	4	8	¥ 18,800
1 W8	P3	SPRW16X	2.5P	125	39	-	58	19	15	18	4	8	¥ 27,800
1 1/8W7	P4	SPSW18Y	2.5P	135	46	-	62	23	17	20	4	8	¥ 38,100 ※
1 1/4W7	P4	SPMSW20Y	2.5P	145	46	-	67	24	19	22	4	8	¥ 44,300 ※
1 3/8W6	P4	SPMSW22Z	2.5P	155	52	-	71	28	21	24	4	8	¥ 51,300 ※
1 1/2W6	P4	SPMSW24Z	2.5P	165	52	-	76	30	23	26	4	8	¥ 73,400 ※
1 5/8W5	P4	SPMSW260	2.5P	175	59	-	81	32	26	30	4	8	¥ 75,200 ※
1 3/4W5	P4	SPMSW280	2.5P	180	59	-	83	35	26	30	4	8	¥ 97,000 ※
1 7/8W4 1/2	P4	SPMSW309	2.5P	185	65	-	85	38	29	32	4	8	¥ 120,000 ※
2 W4 1/2	P4	SPSW329	2.5P	195	70	-	85	40	32	35	4	8	¥ 138,000 ※
For Screw Threads used on Sewing Machines													
3/32SM56	P1	SPPS06E	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,850 ※
1/8SM40	P1	SPPS08H	2.5P	52	11	16	28	5	4	7	3	3	¥ 2,100 ※
1/8SM44	P1	SPPS08G	2.5P	52	11	16	28	5	4	7	3	3	¥ 2,100
9/64SM40	P1	SPPS09H	2.5P	52	11	16	29	5	4	7	3	3	¥ 2,100
11/64SM40	P1	SPPS11H	2.5P	60	13	21	33	5.5	4.5	7	3	3	¥ 2,050
3/16SM28	P2	SPQS12K	2.5P	60	13	21	32	5.5	4.5	7	3	3	¥ 2,050 ※
3/16SM32	P2	SPQS12J	2.5P	60	13	21	32	5.5	4.5	7	3	3	¥ 2,050 ※
7/32SM32	P2	SPQS14J	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,190 ※
15/64SM28	P2	SPQS15K	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,190 ※
1/4SM24	P2	SPQS16M	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,190 ※
1/4SM40	P1	SPPS16H	2.5P	62	8.6	26	33	6	4.5	7	3	5	¥ 3,150 ※

① Spiral Fluted Taps (for blind hole)

② Spiral Fluted Taps (for through hole)

③ Spiral Pointed Taps (for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills Premium Thread Mills

⑩ Dies

⑪ Center Drills Centering Tools

⑫ Precision Machinery/ Medical Surgical Instruments

JIS

Spiral Fluted Tap Series for blind hole

ANSI

SP

Spiral Fluted Taps

Specification



Tapping Speed depending on Materials

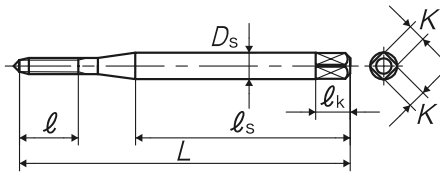
Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼
5~10 (m/min)	5~10 (m/min)

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

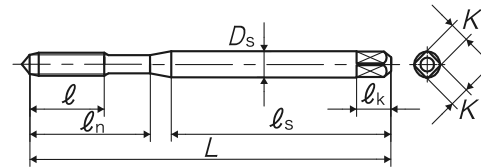


■ Spiral flutes continuously curl the chips and discharge them back toward the shank of the tap. Spiral flute taps are the most suitable for blind hole processing.

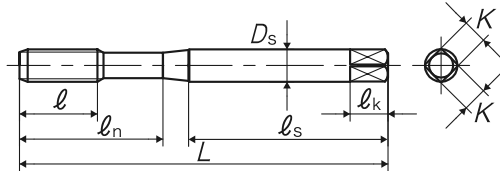
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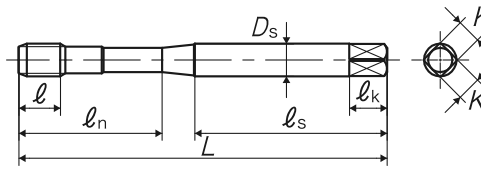
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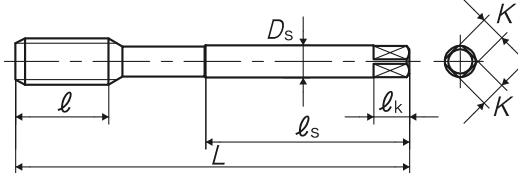
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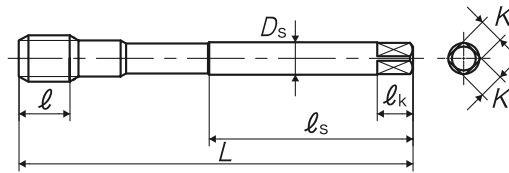
TYPE:4



TYPE:5



TYPE:6



Segment : 1C

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	ℓ_s (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	TYPE
For Metric Threads												
M2 × 0.4	D3	SS2.0E3NEB	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
M2.2 × 0.45	D3	SS2.2F3NEB	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
M2.5 × 0.45	D3	SS2.5F3NEB	2.5P	2.205	0.354	0.693	1.28	0.141	0.11	0.187	2	2
M2.6 × 0.45	D3	SS2.6F3NEB	2.5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
M3 × 0.5	D3	SS3.0G3NEB	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	3	2
M3.5 × 0.6	D4	SS3.5H4NEB	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2

· This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

1

ANSI

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

ANSI

①-60

① Spiral Fluted Tap Series for blind hole

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

ANSI

SP Spiral Fluted Taps

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M4 × 0.7	D4	SS4.0I4NEB	2.5P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	3	2
M5 × 0.8	D4	SS5.0K4NEB	2.5P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	3	2
M6 × 1	D5	SS6.0M5NEB	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
M7 × 1	D5	SS7.0M5NEB	2.5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	3
M7 × 0.75	D4	SS7.0J4NEB	2.5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	3
M7 × 0.5	D4	SS7.0G4NEB	2.5P	3.543	0.394	1.339	1.831	0.318	0.238	0.375	3	4
M8 × 1.25	D5	SS8.0N5NEB	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 1	D5	SS8.0M5NEB	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 0.75	D4	SS8.0J4NEB	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 0.5	D4	SS8.0G4NEB	2.5P	3.543	0.394	1.378	1.831	0.318	0.238	0.375	3	4
M9 × 1.25	D5	SS9.0N5NEB	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
M9 × 1	D5	SS9.0M5NEB	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
M10 × 1.5	D6	SS010O6NEB	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 1.25	D5	SS010N5NEB	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 1	D5	SS010M5NEB	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 0.75	D4	SS010J4NEB	2.5P	3.937	0.512	1.535	2.126	0.381	0.286	0.437	3	4
M11 × 1.5	D6	SS011O6NEB	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
M12 × 1.75	D6	SS012P6NEB	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M12 × 1.5	D6	SS012O6NEB	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M12 × 1.25	D6	SS012N6NEB	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M12 × 1	D5	SS012M5NEB	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M14 × 2	D7	SS014Q7NEB	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M14 × 1.5	D6	SS014O6NEB	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M14 × 1.25	D6	SS014N6NEB	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M14 × 1	D5	SS014M5NEB	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M16 × 2	D7	SS016Q7NEB	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
M16 × 1.5	D6	SS016O6NEB	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
M16 × 1	D5	SS016M5NEB	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
M18 × 2.5	D7	SS018R7NEB	2.5P	4.921	1.299	-	2.52	0.542	0.406	0.625	4	5
M18 × 2	D7	SS018Q7NEB	2.5P	4.921	1.299	-	2.52	0.542	0.406	0.625	4	5
M18 × 1.5	D6	SS018O6NEB	2.5P	4.921	0.945	-	2.52	0.542	0.406	0.625	4	6
M18 × 1	D5	SS018M5NEB	2.5P	4.921	0.945	-	2.52	0.542	0.406	0.625	4	6
M20 × 2.5	D7	SS020R7NEB	2.5P	5.512	1.299	-	2.795	0.652	0.489	0.687	4	5
M20 × 2	D7	SS020Q7NEB	2.5P	5.512	1.299	-	2.795	0.652	0.489	0.687	4	5
M20 × 1.5	D6	SS020O6NEB	2.5P	5.512	0.945	-	2.795	0.652	0.489	0.687	4	6
M20 × 1	D5	SS020M5NEB	2.5P	5.512	0.945	-	2.795	0.652	0.489	0.687	4	6
M22 × 2.5	D7	SS022R7NEB	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
M22 × 2	D7	SS022Q7NEB	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
M22 × 1.5	D6	SS022O6NEB	2.5P	5.512	0.945	-	2.795	0.697	0.523	0.75	4	6
M22 × 1	D5	SS022M5NEB	2.5P	5.512	0.945	-	2.795	0.697	0.523	0.75	4	6
M24 × 3	D8	SS024S8NEB	2.5P	6.299	1.457	-	3.228	0.76	0.57	0.75	4	5
M24 × 2	D7	SS024Q7NEB	2.5P	6.299	1.063	-	3.228	0.76	0.57	0.75	4	6
M24 × 1.5	D6	SS024O6NEB	2.5P	6.299	1.063	-	3.228	0.76	0.57	0.75	4	6
M24 × 1	D5	SS024M5NEB	2.5P	6.299	1.063	-	3.228	0.76	0.57	0.75	4	6
M25 × 1.5	D6	SS025O6NEB	2.5P	6.299	1.063	-	3.228	0.8	0.6	0.812	4	6
M26 × 1.5	D6	SS026O6NEB	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M27 × 3	D8	SS027S8NEB	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
M27 × 2	D7	SS027Q7NEB	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M27 × 1.5	D6	SS027O6NEB	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6

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Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

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

SP Spiral Fluted Taps

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M27 × 1	D5	SS027M5NEB	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M28 × 2	D7	SS028Q7NEB	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M28 × 1.5	D6	SS028O6NEB	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M28 × 1	D5	SS028M5NEB	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M30 × 3.5	D9	SS030T9NEB	2.5P	7.087	1.732	-	3.622	1.021	0.766	1	4	5
M30 × 2	D7	SS030Q7NEB	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	6
M30 × 1.5	D6	SS030O6NEB	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	6
M30 × 1	D5	SS030M5NEB	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	6
M32 × 2	D7	SS032Q7NEB	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M32 × 1.5	D6	SS032O6NEB	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M32 × 1	D5	SS032M5NEB	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M33 × 3.5	D9	SS033T9NEB	2.5P	7.087	1.732	-	3.622	1.108	0.831	1.062	4	5
M33 × 2	D7	SS033Q7NEB	2.5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	6
M33 × 1.5	D6	SS033O6NEB	2.5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	6
M33 × 1	D5	SS033M5NEB	2.5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	6
M36 × 4	D9	SS036U9NEB	2.5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	5
M36 × 3	D8	SS036S8NEB	2.5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	5
M36 × 2	D7	SS036Q7NEB	2.5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	6
M36 × 1.5	D6	SS036O6NEB	2.5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	6
M36 × 1	D5	SS036M5NEB	2.5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	6
M39 × 4	D9	SS039U9NEB	2.5P	7.874	2.047	-	4.016	1.305	0.979	1.125	4	5
M39 × 3	D8	SS039S8NEB	2.5P	7.874	2.047	-	4.016	1.305	0.979	1.125	4	5
M39 × 2	D7	SS039Q7NEB	2.5P	7.874	1.142	-	4.016	1.305	0.979	1.125	4	6
M39 × 1.5	D6	SS039O6NEB	2.5P	7.874	1.142	-	4.016	1.305	0.979	1.125	4	6
M39 × 1	D5	SS039M5NEB	2.5P	7.874	1.142	-	4.016	1.305	0.979	1.125	4	6
M42 × 4.5	D10	SS042VONEB	2.5P	7.874	2.047	-	4.016	1.43	1.072	1.25	4	5
M42 × 2	D7	SS042Q7NEB	2.5P	7.874	1.142	-	4.016	1.43	1.072	1.25	4	6
M42 × 1.5	D6	SS042O6NEB	2.5P	7.874	1.142	-	4.016	1.43	1.072	1.25	4	6
M42 × 1	D5	SS042M5NEB	2.5P	7.874	1.142	-	4.016	1.43	1.072	1.25	4	6
M45 × 4.5	D10	SS045VONEB	2.5P	8.661	2.323	-	4.409	1.519	1.139	1.25	4	5
M45 × 3	D8	SS045S8NEB	2.5P	8.661	2.323	-	4.409	1.519	1.139	1.25	4	5
M45 × 2	D7	SS045Q7NEB	2.5P	8.661	1.22	-	4.409	1.519	1.139	1.25	4	6
M45 × 1.5	D6	SS045O6NEB	2.5P	8.661	1.22	-	4.409	1.519	1.139	1.25	4	6
M45 × 1	D5	SS045M5NEB	2.5P	8.661	1.22	-	4.409	1.519	1.139	1.25	4	6
M48 × 5	D11	SS048W-NEB	2.5P	9.843	2.559	-	5.039	1.644	1.233	1.375	4	5
M48 × 3	D9	SS048S9NEB	2.5P	9.843	2.559	-	5.039	1.644	1.233	1.375	4	5
M48 × 2	D7	SS048Q7NEB	2.5P	9.843	1.22	-	5.039	1.644	1.233	1.375	4	6
M48 × 1.5	D7	SS048O7NEB	2.5P	9.843	1.22	-	5.039	1.644	1.233	1.375	4	6
M48 × 1	D6	SS048M6NEB	2.5P	9.843	1.22	-	5.039	1.644	1.233	1.375	4	6
For Unified Threads												
No.2-56UNC	GH1	SSUN2E1NEB	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.2-56UNC	GH2	SSUN2E2NEB	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.2-64UNF	GH1	SSUN2D1NEB	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.2-64UNF	GH2	SSUN2D2NEB	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.3-48UNC	GH1	SSUN3F1NEB	2.5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.3-48UNC	GH2	SSUN3F2NEB	2.5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.3-56UNF	GH1	SSUN3E1NEB	2.5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.3-56UNF	GH2	SSUN3E2NEB	2.5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2

1

ANSI

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

ANSI

①-62

① Spiral Fluted Tap Series for blind hole

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

ANSI

SP Spiral Fluted Taps

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
No.4-40UNC	GH1	SSUN4H1NEB	2.5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.4-40UNC	GH2	SSUN4H2NEB	2.5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.4-48UNF	GH1	SSUN4F1NEB	2.5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.4-48UNF	GH2	SSUN4F2NEB	2.5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.5-40UNC	GH1	SSUN5H1NEB	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-40UNC	GH2	SSUN5H2NEB	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-44UNF	GH1	SSUN5G1NEB	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-44UNF	GH2	SSUN5G2NEB	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.6-32UNC	GH1	SSUN6J1NEB	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.6-32UNC	GH2	SSUN6J2NEB	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.6-32UNC	GH3	SSUN6J3NEB	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.6-32UNC	GH4	SSUN6J4NEB	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.6-40UNF	GH1	SSUN6H1NEB	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.6-40UNF	GH2	SSUN6H2NEB	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.8-32UNC	GH2	SSUN8J2NEB	2.5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	3	2
No.8-32UNC	GH3	SSUN8J3NEB	2.5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	3	2
No.8-36UNF	GH2	SSUN8I2NEB	2.5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	3	2
No.8-36UNF	GH3	SSUN8I3NEB	2.5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	3	2
No.10-24UNC	GH2	SSUNAM2NEB	2.5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	3	2
No.10-24UNC	GH3	SSUNAM3NEB	2.5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	3	2
No.10-32UNF	GH2	SSUNAJ2NEB	2.5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	3	2
No.10-32UNF	GH3	SSUNAJ3NEB	2.5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	3	2
No.12-24UNC	GH2	SSUNCM2NEB	2.5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	3	2
No.12-24UNC	GH3	SSUNCM3NEB	2.5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	3	2
No.12-28UNF	GH2	SSUNCK2NEB	2.5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	3	2
No.12-28UNF	GH3	SSUNCK3NEB	2.5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	3	2
1/4-20UNC	GH2	SSU04N2NEB	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-20UNC	GH3	SSU04N3NEB	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-20UNC	GH5	SSU04N5NEB	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-20UNC	GH11	SSU04N-EEB	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH2	SSU04K2NEB	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	SSU04K3NEB	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	SSU04K4NEB	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH11	SSU04K-EEB	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
5/16-18UNC	GH2	SSU05O2NEB	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-18UNC	GH3	SSU05O3NEB	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-18UNC	GH5	SSU05O5NEB	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-18UNC	GH11	SSU05O-EEB	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH2	SSU05M2NEB	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	SSU05M3NEB	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	SSU05M4NEB	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH5	SSU05M5NEB	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH11	SSU05M-EEB	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	SSU06P3NEB	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-16UNC	GH4	SSU06P4NEB	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-16UNC	GH5	SSU06P5NEB	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-16UNC	GH11	SSU06P-EEB	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH2	SSU06M2NEB	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	SSU06M3NEB	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3

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①-63

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented
Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

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

SP Spiral Fluted Taps

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
3/8-24UNF	GH4	SSU06M4NEB	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH11	SSU06M-EEB	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
7/16-14UNC	GH3	SSU07Q3NEB	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-14UNC	GH4	SSU07Q4NEB	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-14UNC	GH5	SSU07Q5NEB	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-20UNF	GH2	SSU07N2NEB	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-20UNF	GH3	SSU07N3NEB	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-20UNF	GH5	SSU07N5NEB	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
1/2-13UNC	GH3	SSU08R3NEB	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-13UNC	GH4	SSU08R4NEB	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-13UNC	GH5	SSU08R5NEB	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-13UNC	GH11	SSU08R-EEB	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH2	SSU08N2NEB	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH3	SSU08N3NEB	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH5	SSU08N5NEB	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH11	SSU08N-EEB	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
9/16-12UNC	GH3	SSU09S3NEB	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-12UNC	GH4	SSU09S4NEB	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-12UNC	GH5	SSU09S5NEB	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-18UNF	GH3	SSU09O3NEB	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-18UNF	GH4	SSU09O4NEB	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-18UNF	GH5	SSU09O5NEB	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
5/8-11UNC	GH3	SSU10U3NEB	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-11UNC	GH4	SSU10U4NEB	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-11UNC	GH5	SSU10U5NEB	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-11UNC	GH11	SSU10U-EEB	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-18UNF	GH3	SSU10O3NEB	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-18UNF	GH4	SSU10O4NEB	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-18UNF	GH5	SSU10O5NEB	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-18UNF	GH11	SSU10O-EEB	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
3/4-10UNC	GH3	SSU12V3NEB	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
3/4-10UNC	GH5	SSU12V5NEB	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
3/4-10UNC	GH11	SSU12V-EEB	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
3/4-16UNF	GH3	SSU12P3NEB	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
3/4-16UNF	GH4	SSU12P4NEB	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
3/4-16UNF	GH5	SSU12P5NEB	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
3/4-16UNF	GH11	SSU12P-EEB	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
7/8-9UNC	GH4	SSU14W4NEB	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
7/8-9UNC	GH5	SSU14W5NEB	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
7/8-9UNC	GH6	SSU14W6NEB	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
7/8-14UNF	GH3	SSU14Q3NEB	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
7/8-14UNF	GH4	SSU14Q4NEB	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
7/8-14UNF	GH6	SSU14Q6NEB	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
1 -8UNC	GH4	SSU16X4NEB	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5
1 -8UNC	GH5	SSU16X5NEB	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5
1 -8UNC	GH6	SSU16X6NEB	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5
1 -12UNF	GH3	SSU16S3NEB	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5
1 -12UNF	GH4	SSU16S4NEB	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5
1 -12UNF	GH5	SSU16S5NEB	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5

1

ANSI

Spiral Fluted Taps
(for blind hole) ①

Spiral Fluted Taps
(for through hole) ②

Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫

ANSI

①-64

① Spiral Fluted Tap Series for blind hole

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

ANSI

SP Spiral Fluted Taps

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
1 -12UNF	GH6	SSU16S6NEB	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5
1 1/8-7UNC	GH4	SSU18Y4NEB	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/8-7UNC	GH6	SSU18Y6NEB	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/8-12UNF	GH4	SSU18S4NEB	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/8-12UNF	GH5	SSU18S5NEB	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/4-7UNC	GH4	SSU20Y4NEB	2.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 1/4-7UNC	GH6	SSU20Y6NEB	2.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 1/4-12UNF	GH4	SSU20S4NEB	2.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 1/4-12UNF	GH5	SSU20S5NEB	2.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 3/8-6UNC	GH5	SSU22Z5NEB	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 3/8-6UNC	GH6	SSU22Z6NEB	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 3/8-12UNF	GH4	SSU22S4NEB	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 3/8-12UNF	GH5	SSU22S5NEB	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 1/2-6UNC	GH5	SSU24Z5NEB	2.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5
1 1/2-6UNC	GH6	SSU24Z6NEB	2.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5
1 1/2-12UNF	GH4	SSU24S4NEB	2.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5
1 1/2-12UNF	GH5	SSU24S5NEB	2.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5

①

Spiral Fluted Taps
(for blind hole)

②

Spiral Fluted Taps
(for through hole)

③

Spiral Pointed Taps
(for through hole)

④

Hand Taps

⑤

Cemented
Carbide Taps

⑥

Roll Taps

⑦

Special Thread Taps
Simple Inspection Tools

⑧

Pipe Taps

⑨

Thread Mills
Premium Thread Mills

⑩

Dies

⑪

Center Drills
Centering Tools

⑫

Precision Machinery/
Medical Surgical Instruments

ANSI

①-65

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

Spiral Fluted Tap Series for blind hole

DIN

SP

Spiral Fluted Taps

Specification

HSS



Tapping Speeds depending on Materials

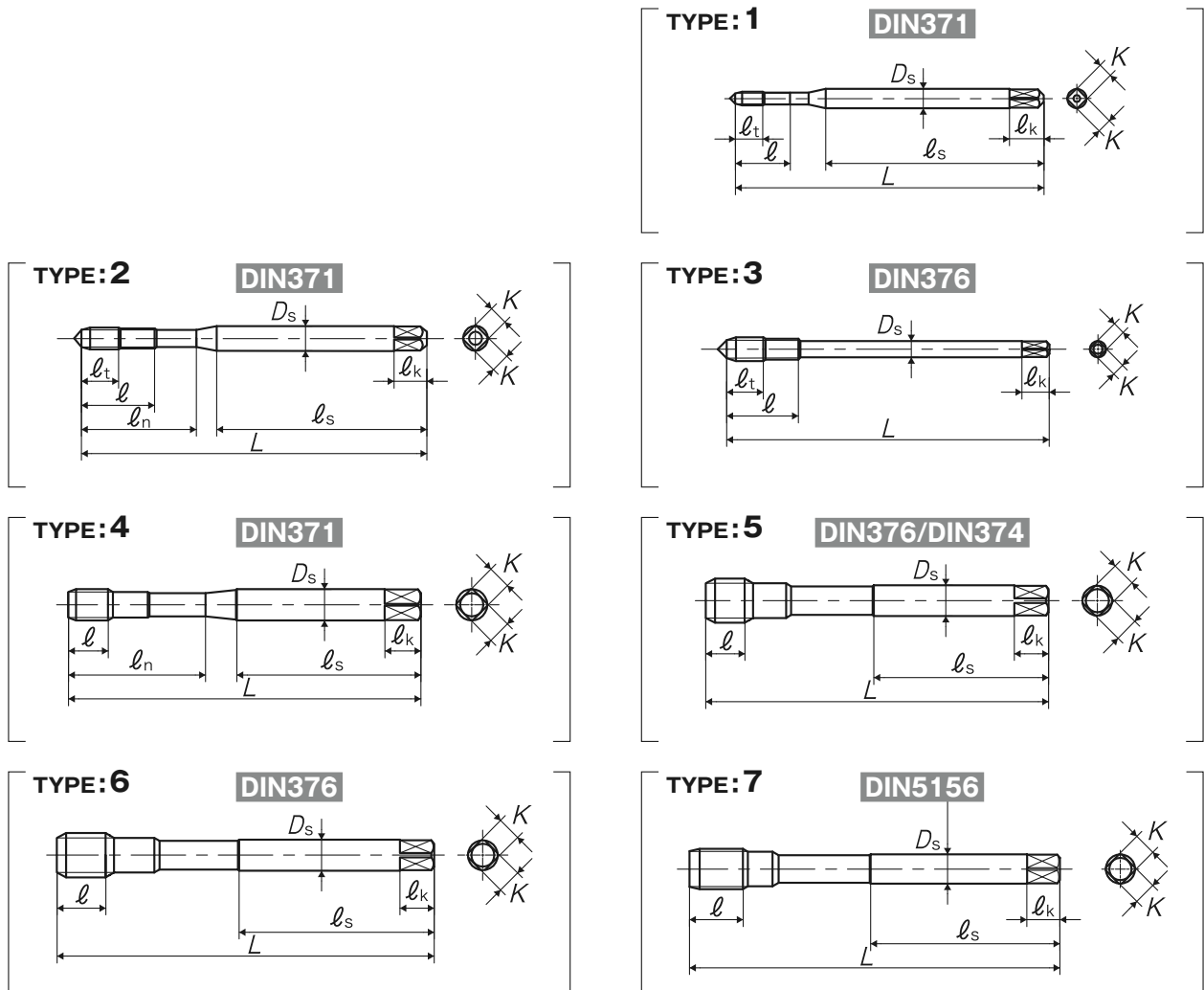
Medium carbon steels
中炭素鋼
5~10
(m/min)

High carbon steels
高炭素鋼
5~10
(m/min)

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	D _s	K	ℓ _k



■ Spiral flutes continuously curl the chips and discharge them back toward the shank of the tap. Spiral flute taps are the most suitable for blind hole processing.



1

DIN

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
Premium Thread Mills

Dies

Center Drills
Centering Tools

Precision Machinery/
Medical Surgical Instruments

DIN

1-66

① Spiral Fluted Tap Series for blind hole

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

DIN

SP Spiral Fluted Taps

Segment : 1D (G=1H)

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
For Metric Threads													
M2 × 0.4	ISO2	SD2.0EANEB	2.5P	45	4	8	-	32	2.8	2.1	5	2	1
M2.2 × 0.45	ISO2	SD2.2FANEB	2.5P	45	4	9	-	32	2.8	2.1	5	2	1
M2.5 × 0.45	ISO2	SD2.5FANEB	2.5P	50	4	8	15	33	2.8	2.1	5	2	2
M2.6 × 0.45	ISO2	SD2.6FANEB	2.5P	50	4	8	15	33	2.8	2.1	5	2	2
M3 × 0.5	ISO2	SD3.0GANEB	2.5P	56	5	9	18	34	3.5	2.7	6	3	2
M3 × 0.5	ISO3	SD3.0GMNEB	2.5P	56	5	9	18	34	3.5	2.7	6	3	2
M3.5 × 0.6	ISO2	SD3.5HANEB	2.5P	56	7	11	20	32	4	3	6	3	2
M4 × 0.7	ISO2	SD4.0IANEB	2.5P	63	7	13	21	38	4.5	3.4	6	3	2
M4 × 0.7	ISO2	SG4.0IANEB	2.5P	63	7	13	-	-	2.8	2.1	5	3	3
M4 × 0.7	ISO3	SD4.0IMNEB	2.5P	63	7	13	21	38	4.5	3.4	6	3	2
M5 × 0.8	ISO2	SD5.0KANEB	2.5P	70	9	14	25	39	6	4.9	8	3	2
M5 × 0.8	ISO2	SG5.0KANEB	2.5P	70	9	14	-	-	3.5	2.7	6	3	3
M5 × 0.8	ISO3	SD5.0KMNEB	2.5P	70	9	14	25	39	6	4.9	8	3	2
M6 × 1	ISO2	SD6.0MANEB	2.5P	80	11	15	30	45	6	4.9	8	3	2
M6 × 1	ISO2	SG6.0MANEB	2.5P	80	11	15	-	-	4.5	3.4	6	3	3
M6 × 1	ISO3	SD6.0MMNEB	2.5P	80	11	15	30	45	6	4.9	8	3	2
M7 × 1	ISO2	SD7.0MANEB	2.5P	80	-	11	30	45	7	5.5	8	3	4
M7 × 0.75	ISO2	SM7.0JANEB	2.5P	80	-	8	-	41	5.5	4.3	7	3	5
M7 × 0.5	ISO2	SM7.0GANEB	2.5P	80	-	8	-	41	5.5	4.3	7	3	5
M8 × 1.25	ISO2	SD8.0NANEB	2.5P	90	-	12	35	47	8	6.2	9	3	4
M8 × 1.25	ISO2	SG8.0NANEB	2.5P	90	-	12	-	46	6	4.9	8	3	5
M8 × 1.25	ISO3	SD8.0NMNEB	2.5P	90	-	12	35	47	8	6.2	9	3	4
M8 × 1	ISO2	SM8.0MANEB	2.5P	90	-	12	-	46	6	4.9	8	3	5
M8 × 0.75	ISO2	SM8.0JANEB	2.5P	80	-	12	-	41	6	4.9	8	3	5
M8 × 0.5	ISO2	SM8.0GANEB	2.5P	80	-	10	-	41	6	4.9	8	3	5
M9 × 1.25	ISO2	SG9.0NANEB	2.5P	90	-	12	-	46	7	5.5	8	3	5
M9 × 1.25	ISO2	SD9.0NANEB	2.5P	90	-	12	35	48	9	7	10	3	4
M9 × 1.25	ISO3	SD9.0NMNEB	2.5P	90	-	12	35	48	9	7	10	3	4
M9 × 1	ISO2	SM9.0MANEB	2.5P	90	-	12	-	46	7	5.5	8	3	5
M10 × 1.5	ISO2	SD010OANEB	2.5P	100	-	13	39	52.5	10	8	11	3	4
M10 × 1.5	ISO2	SG010OANEB	2.5P	100	-	13	-	51	7	5.5	8	3	5
M10 × 1.5	ISO3	SD010OMNEB	2.5P	100	-	13	39	52.5	10	8	11	3	4
M10 × 1.25	ISO2	SM010NANEB	2.5P	100	-	13	-	51	7	5.5	8	3	5
M10 × 1	ISO2	SM010MANEB	2.5P	90	-	13	-	46	7	5.5	8	3	5
M10 × 0.75	ISO2	SM010JANEB	2.5P	90	-	13	-	46	7	5.5	8	3	5
M11 × 1.5	ISO2	SG011OANEB	2.5P	100	-	13	-	51	8	6.2	9	3	5
M12 × 1.75	ISO2	SG012PANEB	2.5P	110	-	15	-	56	9	7	10	3	6
M12 × 1.75	ISO3	SG012PMNEB	2.5P	110	-	15	-	56	9	7	10	3	6
M12 × 1.5	ISO2	SM012OANEB	2.5P	100	-	15	-	51	9	7	10	3	5
M12 × 1.25	ISO2	SM012NANEB	2.5P	100	-	15	-	51	9	7	10	3	5
M12 × 1	ISO2	SM012MANEB	2.5P	100	-	15	-	51	9	7	10	3	5
M14 × 2	ISO2	SG014QANEB	2.5P	110	-	18	-	56	11	9	12	3	6
M14 × 2	ISO3	SG014QMNEB	2.5P	110	-	18	-	56	11	9	12	3	6
M14 × 1.5	ISO2	SM014OANEB	2.5P	100	-	14	-	51	11	9	12	3	5
M14 × 1.25	ISO2	SM014NANEB	2.5P	100	-	14	-	51	11	9	12	3	5
M14 × 1	ISO2	SM014MANEB	2.5P	100	-	14	-	51	11	9	12	3	5
M16 × 2	ISO2	SG016QANEB	2.5P	110	-	18	-	56	12	9	12	3	6
M16 × 2	ISO3	SG016QMNEB	2.5P	110	-	18	-	56	12	9	12	3	6
M16 × 1.5	ISO2	SM016OANEB	2.5P	100	-	14	-	51	12	9	12	3	5

① Spiral Fluted Taps (for blind hole)

② Spiral Fluted Taps (for through hole)

③ Spiral Pointed Taps (for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills Premium Thread Mills

⑩ Dies

⑪ Center Drills Centering Tools

⑫ Precision Machinery/ Medical Surgical Instruments

DIN

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)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M16 × 1	ISO2	SM016MANEB	2.5P	100	-	14	-	51	12	9	12	3	5
M18 × 2.5	ISO2	SG018RANEB	2.5P	125	-	20	-	64	14	11	14	4	6
M18 × 2	ISO2	SM018QANEB	2.5P	125	-	18	-	64	14	11	14	4	5
M18 × 1.5	ISO2	SM018OANEB	2.5P	110	-	14	-	56	14	11	14	4	5
M18 × 1	ISO2	SM018MANEB	2.5P	110	-	14	-	56	14	11	14	4	5
M20 × 2.5	ISO2	SG020RANEB	2.5P	140	-	20	-	71	16	12	15	4	6
M20 × 2	ISO2	SM020QANEB	2.5P	140	-	18	-	71	16	12	15	4	5
M20 × 1.5	ISO2	SM020OANEB	2.5P	125	-	14	-	64	16	12	15	4	5
M20 × 1	ISO2	SM020MANEB	2.5P	125	-	14	-	64	16	12	15	4	5
M22 × 2.5	ISO2	SG022RANEB	2.5P	140	-	20	-	71	18	14.5	17	4	6
M22 × 2	ISO2	SM022QANEB	2.5P	140	-	18	-	71	18	14.5	17	4	5
M22 × 1.5	ISO2	SM022OANEB	2.5P	125	-	14	-	64	18	14.5	17	4	5
M22 × 1	ISO2	SM022MANEB	2.5P	125	-	14	-	64	18	14.5	17	4	5
M24 × 3	ISO2	SG024SANEB	2.5P	160	-	25	-	82	18	14.5	17	4	6
M24 × 2	ISO2	SM024QANEB	2.5P	140	-	18	-	71	18	14.5	17	4	5
M24 × 1.5	ISO2	SM024OANEB	2.5P	140	-	18	-	71	18	14.5	17	4	5
M24 × 1	ISO2	SM024MANEB	2.5P	140	-	18	-	71	18	14.5	17	4	5
M25 × 1.5	ISO2	SM025OANEB	2.5P	140	-	18	-	71	18	14.5	17	4	5
M26 × 1.5	ISO2	SM026OANEB	2.5P	140	-	18	-	71	18	14.5	17	4	5
M27 × 3	ISO2	SG027SANEB	2.5P	160	-	25	-	82	20	16	19	4	6
M27 × 2	ISO2	SM027QANEB	2.5P	140	-	20	-	71	20	16	19	4	5
M27 × 1.5	ISO2	SM027OANEB	2.5P	140	-	20	-	71	20	16	19	4	5
M27 × 1	ISO2	SM027MANEB	2.5P	140	-	20	-	71	20	16	19	4	5
M28 × 2	ISO2	SM028QANEB	2.5P	140	-	20	-	71	20	16	19	4	5
M28 × 1.5	ISO2	SM028OANEB	2.5P	140	-	20	-	71	20	16	19	4	5
M28 × 1	ISO2	SM028MANEB	2.5P	140	-	20	-	71	20	16	19	4	5
M30 × 3.5	ISO2	SG030TANEB	2.5P	180	-	30	-	92	22	18	21	4	6
M30 × 2	ISO2	SM030QANEB	2.5P	150	-	20	-	77	22	18	21	4	5
M30 × 1.5	ISO2	SM030OANEB	2.5P	150	-	20	-	77	22	18	21	4	5
M30 × 1	ISO2	SM030MANEB	2.5P	150	-	20	-	77	22	18	21	4	5
M32 × 2	ISO2	SM032QANEB	2.5P	150	-	20	-	77	22	18	21	4	5
M32 × 1.5	ISO2	SM032OANEB	2.5P	150	-	20	-	77	22	18	21	4	5
M32 × 1	ISO2	SM032MANEB	2.5P	150	-	20	-	77	22	18	21	4	5
M33 × 3.5	ISO2	SG033TANEB	2.5P	180	-	30	-	92	25	20	23	4	6
M33 × 2	ISO2	SM033QANEB	2.5P	160	-	20	-	82	25	20	23	4	5
M33 × 1.5	ISO2	SM033OANEB	2.5P	160	-	20	-	82	25	20	23	4	5
M33 × 1	ISO2	SM033MANEB	2.5P	160	-	20	-	82	25	20	23	4	5
M36 × 4	ISO2	SG036UANEB	2.5P	200	-	40	-	102	28	22	25	4	6
M36 × 3	ISO2	SM036SANEB	2.5P	200	-	30	-	102	28	22	25	4	5
M36 × 2	ISO2	SM036QANEB	2.5P	170	-	20	-	87	28	22	25	4	5
M36 × 1.5	ISO2	SM036OANEB	2.5P	170	-	20	-	87	28	22	25	4	5
M36 × 1	ISO2	SM036MANEB	2.5P	170	-	20	-	87	28	22	25	4	5
M39 × 4	ISO2	SG039UANEB	2.5P	200	-	40	-	102	32	24	27	4	6
M39 × 2	ISO2	SM039QANEB	2.5P	170	-	20	-	87	32	24	27	4	5
M39 × 1.5	ISO2	SM039OANEB	2.5P	170	-	20	-	87	32	24	27	4	5
M39 × 1	ISO2	SM039MANEB	2.5P	170	-	20	-	87	32	24	27	4	5
M42 × 4.5	ISO2	SG042VANEB	2.5P	200	-	40	-	102	32	24	27	4	6
M42 × 2	ISO2	SM042QANEB	2.5P	170	-	20	-	87	32	24	27	4	5
M42 × 1.5	ISO2	SM042OANEB	2.5P	170	-	20	-	87	32	24	27	4	5
M42 × 1	ISO2	SM042MANEB	2.5P	170	-	20	-	87	32	24	27	4	5

1

DIN

Spiral Fluted Taps
(for blind hole) ①Spiral Fluted Taps
(for through hole) ②Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪Precision Machinery/
Medical Surgical Instruments ⑫

DIN

①-68

① Spiral Fluted Tap Series for blind hole

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

DIN

SP Spiral Fluted Taps

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M45 × 4.5	ISO2	SG045VANE	2.5P	220	-	45	-	112	36	29	32	4	6
M45 × 3	ISO2	SM045SANE	2.5P	200	-	40	-	102	36	29	32	4	5
M45 × 2	ISO2	SM045QANE	2.5P	180	-	25	-	92	36	29	32	4	5
M45 × 1.5	ISO2	SM045OANE	2.5P	180	-	25	-	92	36	29	32	4	5
M45 × 1	ISO2	SM045MANE	2.5P	180	-	25	-	92	36	29	32	4	5
M48 × 5	ISO2	SG048WANE	2.5P	250	-	45	-	128	36	29	32	4	6
M48 × 3	ISO2	SM048SANE	2.5P	225	-	40	-	115	36	29	32	4	5
M48 × 2	ISO2	SM048QANE	2.5P	190	-	25	-	97	36	29	32	4	5
M48 × 1.5	ISO2	SM048OANE	2.5P	190	-	25	-	97	36	29	32	4	5
M48 × 1	ISO2	SM048MANE	2.5P	190	-	25	-	97	36	29	32	4	5
For Unified Threads													
No.4-40UNC	2B	SDUN4HXNE	2.5P	56	11	5	18	34	3.5	2.7	6	2	2
No.4-48UNF	2B	SDUN4FXNE	2.5P	56	11	5	18	34	3.5	2.7	6	2	2
No.5-40UNC	2B	SDUN5HXNE	2.5P	56	5	11	18	34	3.5	2.7	6	3	2
No.5-44UNF	2B	SDUN5GXNE	2.5P	56	5	11	18	34	3.5	2.7	6	3	2
No.6-32UNC	2B	SDUN6JXNE	2.5P	56	7	11	19	32	4	3	6	3	2
No.6-40UNF	2B	SDUN6HXNE	2.5P	56	7	11	19	32	4	3	6	3	2
No.8-32UNC	2B	SDUN8JXNE	2.5P	63	7	13	21	38	4.5	3.4	6	3	2
No.8-36UNF	2B	SDUN8IXNE	2.5P	63	7	13	21	38	4.5	3.4	6	3	2
No.10-24UNC	2B	SDUNAMXNE	2.5P	70	9	14	24	39	6	4.9	8	3	2
No.10-32UNF	2B	SDUNAJXNE	2.5P	70	9	14	24	39	6	4.9	8	3	2
No.12-24UNC	2B	SDUNCMXNE	2.5P	80	9	15	28	45	6	4.9	8	3	2
No.12-28UNF	2B	SDUNCXNE	2.5P	80	9	15	28	45	6	4.9	8	3	2
1/4-20UNC	2B	SDU04NXNE	2.5P	80	11	15	30	42	7	5.5	8	3	2
1/4-28UNF	2B	SDU04KXNE	2.5P	80	11	15	30	42	7	5.5	8	3	2
5/16-18UNC	2B	SDU05OXNE	2.5P	90	-	12	35	47	8	6.2	9	3	4
5/16-24UNF	2B	SMU05MXNE	2.5P	90	-	12	-	46	6	4.9	8	3	5
3/8-16UNC	2B	SDU06PXNE	2.5P	100	-	13	39	54.5	9	7	10	3	4
3/8-24UNF	2B	SMU06MXNE	2.5P	100	-	13	-	51	7	5.5	8	3	5
7/16-14UNC	2B	SGU07QXNE	2.5P	100	-	13	-	51	8	6.2	9	3	6
7/16-20UNF	2B	SMU07NXNE	2.5P	100	-	13	-	51	8	6.2	9	3	5
1/2-13UNC	2B	SGU08RXNE	2.5P	110	-	15	-	56	9	7	10	3	6
1/2-20UNF	2B	SMU08NXNE	2.5P	100	-	15	-	51	9	7	10	3	5
9/16-12UNC	2B	SGU09SXNE	2.5P	110	-	18	-	56	11	9	12	3	6
9/16-18UNF	2B	SMU09OXNE	2.5P	100	-	14	-	51	11	9	12	3	5
5/8-11UNC	2B	SGU10UXNE	2.5P	110	-	18	-	56	12	9	12	3	6
5/8-18UNF	2B	SMU10OXNE	2.5P	100	-	14	-	51	12	9	12	3	5
3/4-10UNC	2B	SGU12VXNE	2.5P	125	-	20	-	64	14	11	14	4	6
3/4-16UNF	2B	SMU12PXNE	2.5P	110	-	14	-	56	14	11	14	4	5
7/8-9UNC	2B	SGU14WXNE	2.5P	140	-	20	-	71	18	14.5	17	4	6
7/8-14UNF	2B	SMU14QXNE	2.5P	125	-	20	-	64	18	14.5	17	4	5
1 -8UNC	2B	SGU16XXNE	2.5P	160	-	25	-	82	18	14.5	17	4	6
1 -12UNF	2B	SMU16SXNE	2.5P	140	-	18	-	71	18	14.5	17	4	5
1 1/8-7UNC	2B	SGU18YXNE	2.5P	180	-	30	-	92	22	18	21	4	6
1 1/8-12UNF	2B	SMU18SXNE	2.5P	150	-	20	-	77	22	18	21	4	5
1 1/4-7UNC	2B	SGU20YXNE	2.5P	180	-	30	-	92	22	18	21	4	6
1 1/4-12UNF	2B	SMU20SXNE	2.5P	150	-	20	-	77	22	18	21	4	5
1 3/8-6UNC	2B	SGU22ZXNE	2.5P	200	-	40	-	102	28	22	25	4	6
1 3/8-12UNF	2B	SMU22SXNE	2.5P	170	-	20	-	87	28	20	23	4	5
1 1/2-6UNC	2B	SGU24ZXNE	2.5P	200	-	40	-	102	32	24	27	4	6

① Spiral Fluted Taps (for blind hole)

② Spiral Fluted Taps (for through hole)

③ Spiral Pointed Taps (for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills Premium Thread Mills

⑩ Dies

⑪ Center Drills Centering Tools

⑫ Precision Machinery/ Medical Surgical Instruments

DIN

①-69

Think threads with
YAMAWA

• This product is different from JIS products in shape and dimensions, please be careful when using.

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)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
1 1/2-12UNF	2B	SMU24SXNEB	2.5P	170	-	20	-	87	32	24	27	4	5
1 3/4-5UNC	2B	SGU280XNEB	2.5P	220	-	45	-	112	36	29	32	4	6
1 3/4-12UN	2B	SMU28SXNEB	2.5P	180	-	20	-	92	36	29	32	4	5
For G Threads													
G 1/16-28	-	SVG0010NEB	2.5P	90	-	12	-	46	6	4.9	8	3	7
G 1/8-28	-	SVG0020NEB	2.5P	90	-	12	-	46	7	5.5	8	3	7
G 1/4-19	-	SVG0040NEB	2.5P	100	-	14	-	51	11	9	12	3	7
G 3/8-19	-	SVG0060NEB	2.5P	100	-	14	-	51	12	9	12	3	7
G 1/2-14	-	SVG0080NEB	2.5P	125	-	18	-	64	16	12	15	4	7
G 3/4-14	-	SVG0120NEB	2.5P	140	-	20	-	71	20	16	19	4	7
G 7/8-14	-	SVG0140NEB	2.5P	150	-	20	-	77	22	18	21	4	7
G 1-11	-	SVG0160NEB	2.5P	160	-	20	-	82	25	20	23	4	7
G 1 1/8-11	-	SVG0180NEB	2.5P	170	-	20	-	87	28	22	25	4	7
G 1 1/4-11	-	SVG0200NEB	2.5P	170	-	20	-	87	32	24	27	4	7
G 1 1/2-11	-	SVG0240NEB	2.5P	190	-	25	-	97	36	29	32	4	7

1

DIN

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

DIN

①-70

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

+SP

Plus Series Spiral Fluted Taps



Specification

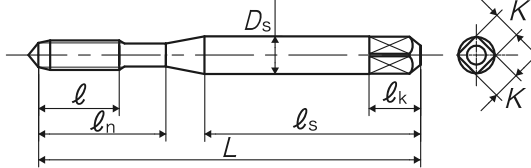


■The +SP is a spiral flute tap for tapping blind holes. It is most suitable for the synchronous feed of CNC machining centers in the middle to high speed range.

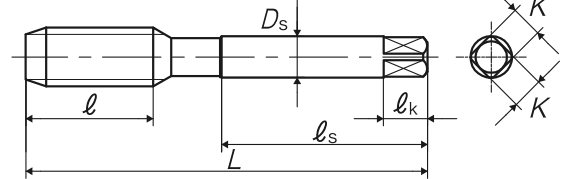
Tapping Speeds depending on Materials

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

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	MSRP
For Metric Threads													
M2 × 0.4	P1	SNPP2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	1	¥ 2,530
M2.2 × 0.45	P1	SNPP2.2F	2.5P	42	8.1	12	27	3	2.5	5	2	1	¥ 2,440
M2.3 × 0.4	P1	SNPP2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	1	¥ 2,440
M2.5 × 0.45	P1	SNPP2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	1	¥ 2,060
M2.6 × 0.45	P1	SNPP2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	1	¥ 2,060
M3 × 0.5	P1	SNPP3.0G	2.5P	46	9	14	26	4	3.2	6	3	1	¥ 1,360
M3.5 × 0.6	P1	SNPP3.5H	2.5P	52	11	16	29	5	4	7	3	1	¥ 1,440
M4 × 0.7	P2	SNPQ4.0I	2.5P	52	11	17	29	5	4	7	3	1	¥ 1,360
M5 × 0.8	P2	SNPQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 1,370
M6 × 1	P2	SNPQ6.0M	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 1,510
M8 × 1.25	P2	SNPQ8.0N	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 2,100
M10 × 1.5	P2	SNPQ010O	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 2,670
M10 × 1.25	P2	SNPQ010N	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 2,670
M12 × 1.75	P2	SNPQ012P	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 3,780
M12 × 1.25	P2	SNPQ012N	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 3,780

JIS

Spiral Fluted Tap Series for blind hole

S

JIS

SP 1.5P

Spiral Fluted Taps 1.5P

Specification



Tapping Speeds depending on Materials

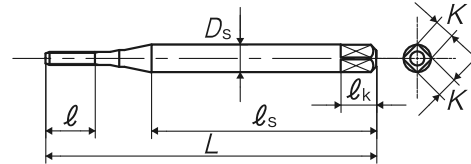
Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼
5~10 (m/min)	5~10 (m/min)

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

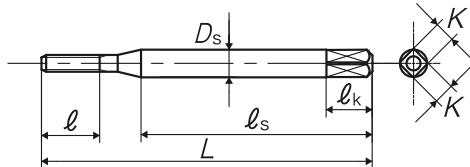


■The SP 1.5P has a shorter cutting chamfer than usual and there is no convex center at the end. This makes it the best spiral flute tap for machining a blind hole that does not have the pilot hole length for processing the thread length.

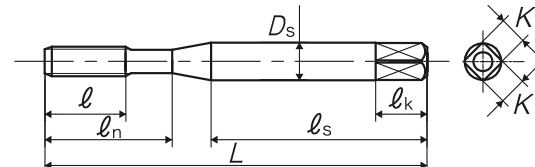
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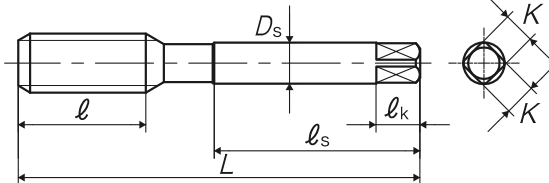
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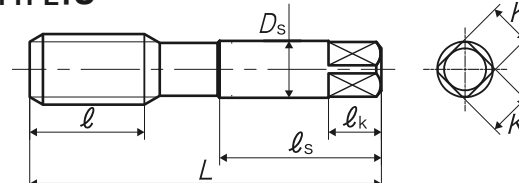
TYPE:3



TYPE:4



TYPE:5



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	MSRP
For Metric Threads													
M1.2 × 0.25	P1	SY1.2BPNEBA	1.5P	36	4.5	-	24	3	2.5	5	2	1	¥ 4,300 ※
M1.4 × 0.3	P1	SY1.4CPNEBA	1.5P	36	5.4	-	24	3	2.5	5	2	1	¥ 3,520 ※
M1.6 × 0.35	P1	SY1.6DPNEBA	1.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,360
M1.7 × 0.35	P1	SY1.7DPNEBA	1.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,360 ※
M1.8 × 0.35	P1	SY1.8DPNEBA	1.5P	42	6.3	-	27	3	2.5	5	2	2	¥ 3,360 ※
M2 × 0.4	P1	SY2.0EPNEBA	1.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,680
M2.3 × 0.4	P1	SY2.3EPNEBA	1.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,440 ※
M2.5 × 0.45	P1	SY2.5FPNEBA	1.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,060 ※
M2.6 × 0.45	P1	SY2.6FPNEBA	1.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,060 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-72

① Spiral Fluted Tap Series for blind hole

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

JIS

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	MSRP
M3 × 0.5	P1	SY3.0GPNEBA	1.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,440
M3.5 × 0.6	P1	SY3.5HPNEBA	1.5P	52	11	16	29	5	4	7	3	3	¥ 1,440 ※
M4 × 0.7	P2	SY4.0IQNEBA	1.5P	52	11	17	29	5	4	7	3	3	¥ 1,440
M5 × 0.8	P2	SY5.0KQNEBA	1.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,450
M6 × 1	P2	SY6.0MQNEBA	1.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,510
M8 × 1.25	P2	SY8.0NQNEBA	1.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,230
M8 × 1	P2	SY8.0MQNEBA	1.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,530 ※
M10 × 1.5	P2	SY010OQNEBA	1.5P	75	23	-	38	7	5.5	8	3	4	¥ 2,840
M10 × 1.25	P2	SY010NQNEBA	1.5P	75	23	-	38	7	5.5	8	3	4	¥ 2,840 ※
M10 × 1	P2	SY010MQNEBA	1.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,370 ※
M12 × 1.75	P2	SY012PQNEBA	1.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,020
M12 × 1.5	P2	SY012OQNEBA	1.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,020 ※
M12 × 1.25	P2	SY012NQNEBA	1.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,020 ※
M12 × 1	P2	SY012MQNEBA	1.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,730 ※
M14 × 2	P2	SY014QQNEBA	1.5P	88	26	-	45	10.5	8	11	3	4	¥ 5,480 ※
M14 × 1.5	P2	SY014OQNEBA	1.5P	88	26	-	45	10.5	8	11	3	4	¥ 5,480 ※
M16 × 2	P2	SY016QQNEBA	1.5P	95	26	-	48	12.5	10	13	3	4	¥ 7,320 ※
M16 × 1.5	P2	SY016OQNEBA	1.5P	95	26	-	48	12.5	10	13	3	4	¥ 7,320 ※
M18 × 2.5	P3	SY018RRNEBA	1.5P	100	33	-	51	14	11	14	4	4	¥ 9,780 ※
M20 × 2.5	P3	SY020RRNEBA	1.5P	105	33	-	50	15	12	15	4	5	¥ 13,400 ※

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

MEMO

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

Dies

⑩

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-75

IPS

ISP

Spiral Fluted Taps for General Purpose



Specification

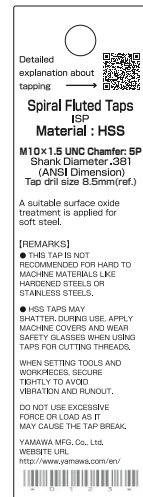


Tapping Speeds depending on Materials

Low carbon steels
低炭素鋼
~5
(m/min)



Blister Pack



Product Features

- The IPS is for a blind hole and mainly used for low speed machining on a drilling machine.
- Use the IPS for tapping iron products like SPC and SS400 where there are a small quantities of threads.
- The ISP has an ideal oxidation surface treatment for tapping iron materials.
- The ISP is ideal for small quantity tapping components such as prototype non-production parts.
- The ISP has spiral flutes to discharge the chips back out of the hole.
- Please use the ISP for tapping of blind holes.



Chips from a tapped hole.

How to Use

- First create the workpiece bore diameter with a drill that matches the screw thread size minor diameter, and then start the tapping.
- Please use a cutting speed of 5 m/min or less.
- When tapping, please use a cutting oil.



Hand tapping using a tap handle.



Machining with a drilling machine.

Thread bored hole diameter table.

Unit: mm

Thread Size	Internal Thread Diameter			Drill Diameter	Percentage of Thread
	Minimum Allowable Bored Hole.	Maximum Allowable Bored Hole.			
		6H (Level 2)	7H (Level 3)		
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%)

Note 1) Recommended bored hole size in this table is for 7H (3rd grade) internal thread, selected from commercially available standard drills.

Note 2) The size of the drill in parentheses is used for cases where the drill cutting oversize is too large or for 6H (2nd grade) internal thread processing.

[Related Products]

Shank Adjuster

- Use the shank adjuster when tapping into deep holes.
- The I series (IHT / ISP / IPO) can be detached from the shank adjuster with one touch.
- For details on shank adjusters, refer to ⑦-83.

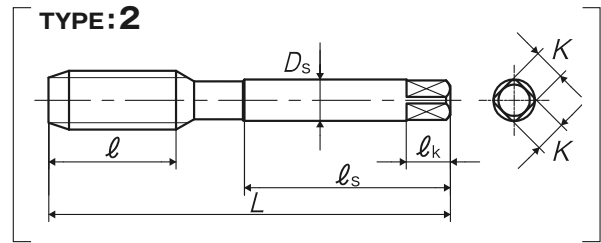
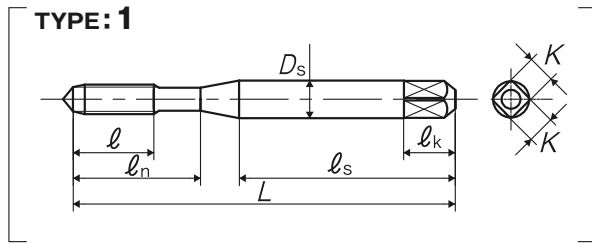


Think threads with
YAMAWA

You can also see it from the video site on the right.



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



Blister Pack

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	MSRP
For Metric Threads												
M3 × 0.5	SI73.0GBP	2.5P	46	9	14	26	4	3.2	6	3	1	¥ 910
M4 × 0.7	SI74.0IBP	2.5P	52	11	17	29	5	4	7	3	1	¥ 950
M5 × 0.8	SI75.0KBP	2.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 960
M6 × 1	SI76.0MBP	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 1,010
M8 × 1.25	SI78.0NBP	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 1,550
M10 × 1.5	SI7010OBP	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 1,940

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-76

① Spiral Fluted Tap Series for blind hole

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

ANSI

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

ISP

Spiral Fluted Taps for General Purpose

Specification

HSS

OX
Oxide



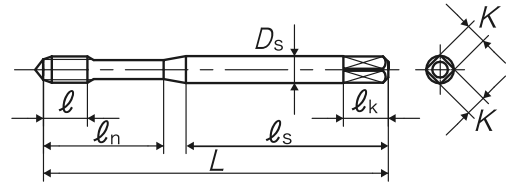
Tapping Speed
depending on Materials

Low carbon steels
低炭素鋼
~5
(m/min)

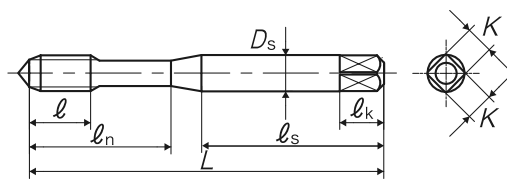
■ Suitable for low speed tapping of steels.
For manual use and drilling machine use.



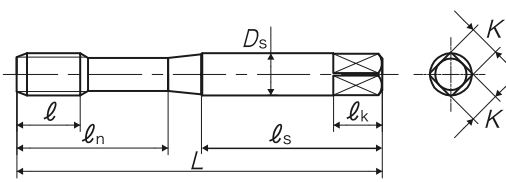
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1C

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	ℓ_s (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	TYPE
For Unified Threads												
No.6-32UNC	-	UAUN6JXHEX	2.5P	2	0.374	0.669	1.201	0.141	0.11	0.187	3	1
No.8-32UNC	-	UAUN8JXHEX	2.5P	2.125	0.374	0.866	1.339	0.168	0.131	0.25	3	1
No.10-24UNC	-	UAUNAMXHEX	2.5P	2.375	0.512	0.866	1.339	0.194	0.152	0.25	3	1
1/4-20UNC	-	UAU04NXHEX	2.5P	2.5	0.591	1.024	1.22	0.255	0.191	0.312	3	2
5/16-18UNC	-	UAU05OXHEX	2.5P	2.718	0.669	1.004	1.378	0.318	0.238	0.375	3	3
3/8-16UNC	-	UAU06PXHEX	2.5P	2.937	0.748	1.059	1.496	0.381	0.286	0.437	3	3
For Unified Threads (In blister package)												
No.6-32UNC	-	UAUN6JXHEXR	2.5P	2	0.374	0.669	1.201	0.141	0.11	0.187	3	1
No.8-32UNC	-	UAUN8JXHEXR	2.5P	2.125	0.374	0.866	1.339	0.168	0.131	0.25	3	1
No.10-24UNC	-	UAUNAMXHEXR	2.5P	2.375	0.512	0.866	1.339	0.194	0.152	0.25	3	1
1/4-20UNC	-	UAU04NXHEXR	2.5P	2.5	0.591	1.024	1.22	0.255	0.191	0.312	3	2
5/16-18UNC	-	UAU05OXHEXR	2.5P	2.718	0.669	1.004	1.378	0.318	0.238	0.375	3	3
3/8-16UNC	-	UAU06PXHEXR	2.5P	2.937	0.748	1.059	1.496	0.381	0.286	0.437	3	3

Blister Package



ANSI

①-77

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

SP OX

Spiral Fluted Taps, Oxidized

Specification

HSS

OX
Oxide



Tapping Speeds depending on Materials

Low carbon steels
低炭素鋼
5~10
(m/min)

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

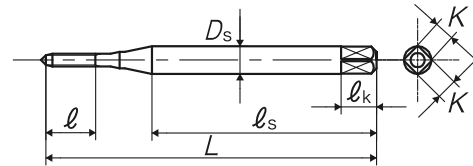
High carbon steels
高炭素鋼
5~10
(m/min)

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

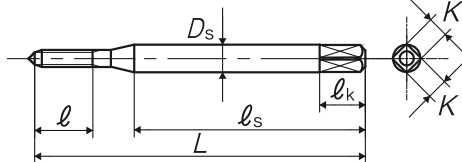


■The SP OX is a spiral flute tap for blind hole tapping. These taps have an applied oxidation treatment to prevent chip welding on the surface of the taps threaded portion. They are suitable for thread processing of soft steel materials where the chips easily weld to the tap like low carbon.

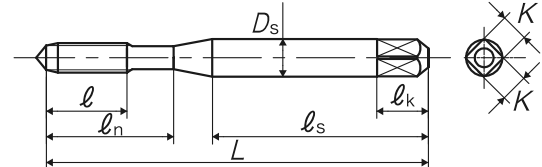
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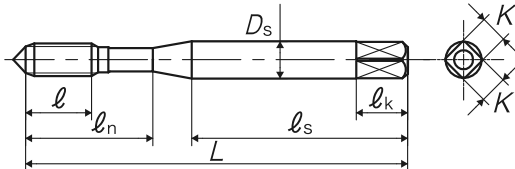
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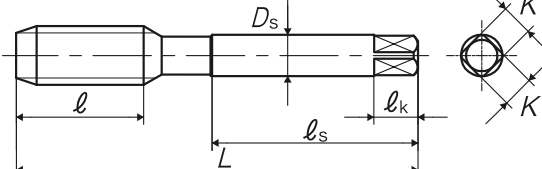
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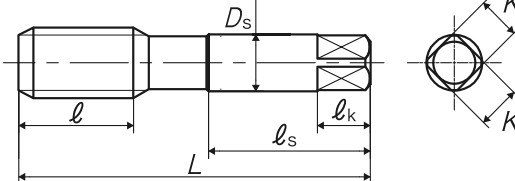
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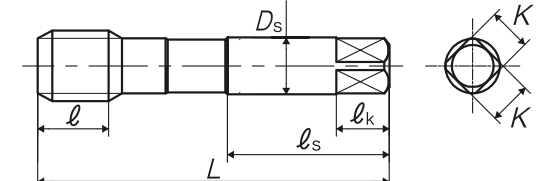
TYPE: 5



TYPE: 6



TYPE: 7



① Spiral Fluted Tap Series for blind hole

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

JIS

SP OX Spiral Fluted Taps, Oxidized

 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	MSRP
For Metric Threads													
M1.4 × 0.3	P1	SPP1.4CX	2.5P	36	5.4	-	24	3	2.5	5	2	1	¥ 4,070 ※
M1.6 × 0.35	P1	SPP1.6DX	2.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,890 ※
M1.7 × 0.35	P1	SPP1.7DX	2.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,890 ※
M2 × 0.4	P1	SPP2.0EX	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 3,110 ※
M2.5 × 0.45	P1	SPP2.5FX	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,380 ※
M2.6 × 0.45	P1	SPP2.6FX	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,380 ※
M3 × 0.5	P1	SPP3.0GX	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,670
M3 × 0.5	P2	SPQ3.0GX	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,670 ※
M3 × 0.5	P3	SPR3.0GX	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,670 ※
3M0.6	P1	SPP3.0HX	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,670 ※
M3.5 × 0.6	P1	SPP3.5HX	2.5P	52	11	16	29	5	4	7	3	3	¥ 1,670 ※
M4 × 0.7	P2	SPQ4.0IX	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,670
M4 × 0.7	P3	SPR4.0IX	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,670 ※
M4 × 0.5	P1	SPP4.0GX	2.5P	52	9	17	29	5	4	7	3	4	¥ 2,450 ※
M4.5 × 0.5	P1	SPP4.5GX	2.5P	60	9	21	33	5.5	4.5	7	3	4	¥ 2,450 ※
M5 × 0.8	P2	SPQ5.0KX	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,680
M5 × 0.8	P3	SPR5.0KX	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,680 ※
M6 × 1	P2	SPQ6.0MX	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,850
M6 × 1	P3	SPR6.0MX	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,850 ※
M6 × 0.75	P2	SPQ6.0JX	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,610 ※
M7 × 1	P2	SPQ7.0MX	2.5P	70	19	-	36	6.2	5	8	3	5	¥ 2,210 ※
M8 × 1.25	P2	SPQ8.0NX	2.5P	70	19	-	36	6.2	5	8	3	5	¥ 2,550
M8 × 1.25	P3	SPR8.0NX	2.5P	70	19	-	36	6.2	5	8	3	5	¥ 2,550 ※
M8 × 1	P2	SPQ8.0MX	2.5P	70	19	-	36	6.2	5	8	3	5	¥ 2,880 ※
M10 × 1.5	P2	SPQ10.0OX	2.5P	75	23	-	38	7	5.5	8	3	5	¥ 3,230
M10 × 1.25	P2	SPQ10.0NX	2.5P	75	23	-	38	7	5.5	8	3	5	¥ 3,230 ※
M10 × 1.25	P3	SPR10.0NX	2.5P	75	23	-	38	7	5.5	8	3	5	¥ 3,230 ※
M10 × 1	P2	SPQ10.0MX	2.5P	75	23	-	38	7	5.5	8	3	5	¥ 3,830 ※
M12 × 1.75	P2	SPQ12.0PX	2.5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,580
M12 × 1.5	P2	SPQ12.0OX	2.5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,580 ※
M12 × 1.25	P2	SPQ12.0NX	2.5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,580 ※
M12 × 1	P2	SPQ12.0MX	2.5P	82	26	-	42	8.5	6.5	9	3	5	¥ 5,380 ※
M14 × 2	P2	SPQ14.0QX	2.5P	88	26	-	45	10.5	8	11	3	5	¥ 6,240 ※
M14 × 1.5	P2	SPQ14.0OX	2.5P	88	26	-	45	10.5	8	11	3	5	¥ 6,240 ※
M14 × 1.25	P2	SPQ14.0NX	2.5P	88	26	-	45	10.5	8	11	3	5	¥ 7,240 ※
M14 × 1	P2	SPQ14.0MX	2.5P	88	26	-	45	10.5	8	11	3	5	¥ 7,240 ※
M16 × 2	P2	SPQ16.0QX	2.5P	95	26	-	48	12.5	10	13	3	5	¥ 8,340
M16 × 1.5	P2	SPQ16.0OX	2.5P	95	26	-	48	12.5	10	13	3	5	¥ 8,340 ※
M16 × 1.25	P2	SPQ16.0NX	2.5P	95	26	-	48	12.5	10	13	3	5	¥ 9,940 ※
M16 × 1	P2	SPQ16.0MX	2.5P	95	26	-	48	12.5	10	13	3	5	¥ 9,940 ※
M18 × 2.5	P3	SPR18.0RX	2.5P	100	33	-	51	14	11	14	4	5	¥ 11,200 ※
M18 × 1.5	P2	SPQ18.0OX	2.5P	100	33	-	51	14	11	14	4	5	¥ 11,200 ※
M20 × 2.5	P3	SPR20.0RX	2.5P	105	33	-	50	15	12	15	4	6	¥ 15,300
M20 × 1.5	P3	SPR20.0OX	2.5P	105	33	-	50	15	12	15	4	6	¥ 15,300 ※
M20 × 1	P2	SPQ20.0MX	2.5P	105	18	-	50	15	12	15	4	7	¥ 19,400 ※
M22 × 2.5	P3	SPR22.0RX	2.5P	115	33	-	55	17	13	16	4	6	¥ 19,500 ※
M22 × 1.5	P3	SPR22.0OX	2.5P	115	33	-	55	17	13	16	4	6	¥ 19,500 ※
M24 × 3	P3	SPR24.0SX	2.5P	120	39	-	55	19	15	18	4	6	¥ 24,300 ※

JIS

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

SP OX Spiral Fluted Taps, Oxidized

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M24 × 1.5	P3	SPR024OX	2.5P	120	39	-	55	19	15	18	4	6	¥ 24,300 ※
M27 × 3	P3	SPR027SX	2.5P	130	39	-	60	20	15	18	4	6	¥ 33,800 ※
M27 × 2	P3	SPR027QX	2.5P	130	39	-	60	20	15	18	4	6	¥ 33,800 ※
M28 × 1.5	P3	SPR028OX	2.5P	135	46	-	62	23	17	20	4	6	¥ 43,000 ※
M30 × 3.5	P4	SPS030TX	2.5P	135	46	-	62	23	17	20	4	6	¥ 43,000 ※
M30 × 3	P3	SPR030SX	2.5P	135	46	-	62	23	17	20	4	6	¥ 43,000 ※
M30 × 2	P3	SPR030QX	2.5P	135	46	-	62	23	17	20	4	6	¥ 43,000 ※
M30 × 1.5	P3	SPR030OX	2.5P	135	46	-	62	23	17	20	4	6	¥ 43,000 ※
M32 × 2	P3	SPMR032QX	2.5P	145	46	-	67	24	19	22	4	6	¥ 50,000 ※
M33 × 3.5	P4	SPMS033TX	2.5P	145	46	-	67	25	19	22	4	6	¥ 50,000 ※
M36 × 4	P4	SPMS036UX	2.5P	155	52	-	71	28	21	24	4	6	¥ 57,900 ※
For Unified Threads													
No.2-56UNC	P1	SPPUN2EX	2.5P	42	8.1	12	27	3	2.5	5	2	3	¥ 3,260 ※
No.4-40UNC	P1	SPPUN4HX	2.5P	46	9	14	25	4	3.2	6	2	3	¥ 2,100 ※
No.5-40UNC	P1	SPPUN5HX	2.5P	52	11	16	28	5	4	7	3	3	¥ 1,960 ※
No.6-32UNC	P2	SPQUN6JX	2.5P	52	11	17	27	5	4	7	3	3	¥ 1,960 ※
No.8-32UNC	P2	SPQUN8JX	2.5P	60	13	22	31	5.5	4.5	7	3	3	¥ 1,970 ※
No.10-24UNC	P2	SPQUNAMX	2.5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,970 ※
No.10-32UNF	P2	SPQUNAJX	2.5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,970 ※
1/4-20UNC	P2	SPQU04NX	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,120 ※
1/4-28UNF	P2	SPQU04KX	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,120 ※
5/16-18UNC	P2	SPQU05OX	2.5P	70	19	-	36	6.2	5	8	3	5	¥ 2,930 ※
5/16-24UNF	P2	SPQU05MX	2.5P	70	19	-	36	6.2	5	8	3	5	¥ 2,930 ※
3/8-16UNC	P2	SPQU06PX	2.5P	75	23	-	38	7	5.5	8	3	5	¥ 3,750 ※
3/8-24UNF	P2	SPQU06MX	2.5P	75	23	-	38	7	5.5	8	3	5	¥ 3,750 ※
7/16-14UNC	P3	SPRU07QX	2.5P	82	26	-	42	8.5	6.5	9	3	5	¥ 5,270 ※
7/16-20UNF	P2	SPQU07NX	2.5P	82	26	-	42	8.5	6.5	9	3	5	¥ 5,270 ※
1/2-13UNC	P3	SPRU08RX	2.5P	88	26	-	45	10.5	8	11	3	5	¥ 5,600 ※
1/2-20UNF	P2	SPQU08NX	2.5P	88	26	-	45	10.5	8	11	3	5	¥ 5,600 ※
9/16-18UNF	P2	SPQU09OX	2.5P	95	26	-	48	12.5	10	13	3	5	¥ 8,340 ※
5/8-11UNC	P3	SPRU10UX	2.5P	95	26	-	48	12.5	10	13	3	5	¥ 8,340 ※
5/8-18UNF	P2	SPQU10OX	2.5P	95	26	-	48	12.5	10	13	3	5	¥ 8,340 ※
3/4-10UNC	P3	SPRU12VX	2.5P	105	33	-	50	15	12	15	4	6	¥ 15,300 ※
3/4-16UNF	P3	SPRU12PX	2.5P	105	33	-	50	15	12	15	4	6	¥ 15,300 ※
7/8-9UNC	P3	SPRU14WX	2.5P	115	33	-	55	17	13	16	4	6	¥ 21,500 ※
7/8-14UNF	P3	SPRU14QX	2.5P	115	33	-	55	17	13	16	4	6	¥ 21,500 ※
1 -8UNC	P3	SPRU16XX	2.5P	125	39	-	58	19	15	18	4	6	¥ 31,400 ※
1 -12UNF	P3	SPRU16SX	2.5P	125	39	-	58	19	15	18	4	6	¥ 31,400 ※
1 1/2 -6UNC	P4	SPMSU24ZX	2.5P	165	52	-	76	30	23	26	4	6	¥ 82,800 ※
1 1/2 -12UNF	P3	SPMRU24SX	2.5P	165	52	-	76	30	23	26	4	6	¥ 82,800 ※
For Whitworth Threads													
1/8W40	P1	SPPW02HX	2.5P	52	11	16	28	5	4	7	3	3	¥ 2,440 ※
5/32W32	P2	SPQW2HJX	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,960 ※
3/16W24	P2	SPQW03MX	2.5P	60	13	21	32	5.5	4.5	7	3	3	¥ 1,970 ※
1/4W20	P2	SPQW04NX	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,120 ※
5/16W18	P2	SPQW05OX	2.5P	70	19	-	36	6.2	5	8	3	5	¥ 2,930 ※
3/8W16	P2	SPQW06PX	2.5P	75	23	-	38	7	5.5	8	3	5	¥ 3,750 ※
7/16W14	P3	SPRW07QX	2.5P	82	26	-	42	8.5	6.5	9	3	5	¥ 5,270 ※
1/2W12	P3	SPRW08SX	2.5P	88	26	-	45	10.5	8	11	3	5	¥ 5,600 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-80

① Spiral Fluted Tap Series for blind hole

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

JIS

SP OX Spiral Fluted Taps, Oxidized

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
5/8W11	P3	SPRW10UX	2.5P	95	26	-	48	12.5	10	13	3	5	¥ 8,340 ※
3/4W10	P3	SPRW12VX	2.5P	105	33	-	50	15	12	15	4	6	¥ 15,300 ※
7/8W9	P3	SPRW14WX	2.5P	115	33	-	55	17	13	16	4	6	¥ 21,500 ※
1 W8	P3	SPRW16XX	2.5P	125	39	-	58	19	15	18	4	6	¥ 31,400 ※
1 1/4W7	P4	SPMSW20YX	2.5P	145	46	-	67	24	19	22	4	6	¥ 50,000 ※
1 1/2W6	P4	SPMSW24ZX	2.5P	165	52	-	76	30	23	26	4	6	¥ 82,800 ※

①

Spiral Fluted Taps
(for blind hole)

②

Spiral Fluted Taps
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Spiral Pointed Taps
(for through hole)

④

Hand Taps

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Carbide Taps

⑥

Roll Taps

⑦

Special Thread Taps
Simple Inspection Tools

⑧

Pipe Taps

⑨

Thread Mills
Premium Thread Mills

⑩

Dies

⑪

Center Drills
Centering Tools

⑫

Precision Machinery/
Medical Surgical Instruments

JIS

①-81

 Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

Spiral Fluted Tap Series for blind hole

ANSI

SP OX

Spiral Fluted Taps, Oxidized



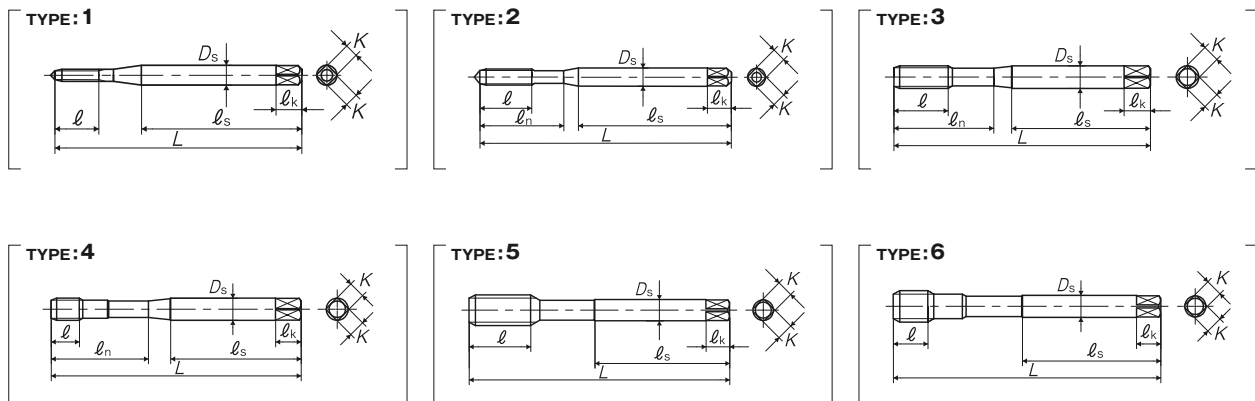
Specification



Tapping Speed depending on Materials

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

■ The SP OX is a spiral flute tap for blind hole tapping. These taps have an applied oxidation treatment to prevent chip welding on the surface of the taps threaded portion. They are suitable for thread processing of soft steel materials where the chips easily weld to the tap like low carbon.



Segment : 1C

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ _n (inch)	ℓ _s (inch)	D _s (inch)	K (inch)	ℓ _k (inch)	No. of flutes	TYPE
For Metric Threads												
M2 × 0.4	D3	SS2.0E3NEX	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
M2.2 × 0.45	D3	SS2.2F3NEX	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
M2.5 × 0.45	D3	SS2.5F3NEX	2.5P	2.205	0.354	0.693	1.28	0.141	0.11	0.187	2	2
M2.6 × 0.45	D3	SS2.6F3NEX	2.5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
M3 × 0.5	D3	SS3.0G3NEX	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	3	2
M3.5 × 0.6	D4	SS3.5H4NEX	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
M4 × 0.7	D4	SS4.0I4NEX	2.5P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	3	2
M5 × 0.8	D4	SS5.0K4NEX	2.5P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	3	2
M6 × 1	D5	SS6.0M5NEX	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
M7 × 1	D5	SS7.0M5NEX	2.5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	3
M7 × 0.75	D4	SS7.0J4NEX	2.5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	3
M7 × 0.5	D4	SS7.0G4NEX	2.5P	3.543	0.394	1.339	1.831	0.318	0.238	0.375	3	4
M8 × 1.25	D5	SS8.0N5NEX	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 1	D5	SS8.0M5NEX	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 0.75	D4	SS8.0J4NEX	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	4
M8 × 0.5	D4	SS8.0G4NEX	2.5P	3.543	0.394	1.378	1.831	0.318	0.238	0.375	3	4
M9 × 1.25	D5	SS9.0N5NEX	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
M9 × 1	D5	SS9.0M5NEX	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
M10 × 1.5	D6	SS010O6NEX	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 1.25	D5	SS010N5NEX	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3

· This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

1

ANSI

Spiral Fluted Taps
(for blind hole)

1

Spiral Fluted Taps
(for through hole)

2

Spiral Pointed Taps
(for through hole)

3

Hand Taps

4

Cemented
Carbide Taps

5

Roll Taps

6

Special Thread Taps
Simple Inspection Tools

7

Pipe Taps

8

Thread Mills
Premium Thread Mills

9

Dies

10

Center Drills
Centering Tools

11

Precision Machinery/
Medical Surgical Instruments

12

ANSI

1-82

① Spiral Fluted Tap Series for blind hole

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

ANSI

SP OX Spiral Fluted Taps, Oxidized

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M10 × 1	D5	SS010M5NEX	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 0.75	D4	SS010J4NEX	2.5P	3.937	0.512	1.535	2.126	0.381	0.286	0.437	3	4
M11 × 1.5	D6	SS011O6NEX	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
M12 × 1.75	D6	SS012P6NEX	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M12 × 1.5	D6	SS012O6NEX	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M12 × 1.25	D6	SS012N6NEX	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M12 × 1	D5	SS012M5NEX	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M14 × 2	D7	SS014Q7NEX	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M14 × 1.5	D6	SS014O6NEX	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M14 × 1.25	D6	SS014N6NEX	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M14 × 1	D5	SS014M5NEX	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M16 × 2	D7	SS016Q7NEX	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
M16 × 1.5	D6	SS016O6NEX	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
M16 × 1	D5	SS016M5NEX	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
M18 × 2.5	D7	SS018R7NEX	2.5P	4.921	1.299	-	2.52	0.542	0.406	0.625	4	5
M18 × 2	D7	SS018Q7NEX	2.5P	4.921	1.299	-	2.52	0.542	0.406	0.625	4	5
M18 × 1.5	D6	SS018O6NEX	2.5P	4.921	0.945	-	2.52	0.542	0.406	0.625	4	6
M18 × 1	D5	SS018M5NEX	2.5P	4.921	0.945	-	2.52	0.542	0.406	0.625	4	6
M20 × 2.5	D7	SS020R7NEX	2.5P	5.512	1.299	-	2.795	0.652	0.489	0.687	4	5
M20 × 2	D7	SS020Q7NEX	2.5P	5.512	1.299	-	2.795	0.652	0.489	0.687	4	5
M20 × 1.5	D6	SS020O6NEX	2.5P	5.512	0.945	-	2.795	0.652	0.489	0.687	4	6
M20 × 1	D5	SS020M5NEX	2.5P	5.512	0.945	-	2.795	0.652	0.489	0.687	4	6
M22 × 2.5	D7	SS022R7NEX	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
M22 × 2	D7	SS022Q7NEX	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
M22 × 1.5	D6	SS022O6NEX	2.5P	5.512	0.945	-	2.795	0.697	0.523	0.75	4	6
M22 × 1	D5	SS022M5NEX	2.5P	5.512	0.945	-	2.795	0.697	0.523	0.75	4	6
M24 × 3	D8	SS024S8NEX	2.5P	6.299	1.457	-	3.228	0.76	0.57	0.75	4	5
M24 × 2	D7	SS024Q7NEX	2.5P	6.299	1.063	-	3.228	0.76	0.57	0.75	4	6
M24 × 1.5	D6	SS024O6NEX	2.5P	6.299	1.063	-	3.228	0.76	0.57	0.75	4	6
M24 × 1	D5	SS024M5NEX	2.5P	6.299	1.063	-	3.228	0.76	0.57	0.75	4	6
M25 × 1.5	D6	SS025O6NEX	2.5P	6.299	1.063	-	3.228	0.8	0.6	0.812	4	6
M26 × 1.5	D6	SS026O6NEX	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M27 × 3	D8	SS027S8NEX	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
M27 × 2	D7	SS027Q7NEX	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M27 × 1.5	D6	SS027O6NEX	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M27 × 1	D5	SS027M5NEX	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M28 × 2	D7	SS028Q7NEX	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M28 × 1.5	D6	SS028O6NEX	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M28 × 1	D5	SS028M5NEX	2.5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M30 × 3.5	D9	SS030T9NEX	2.5P	7.087	1.732	-	3.622	1.021	0.766	1	4	5
M30 × 2	D7	SS030Q7NEX	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	6
M30 × 1.5	D6	SS030O6NEX	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	6
M30 × 1	D5	SS030M5NEX	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	6
M32 × 2	D7	SS032Q7NEX	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M32 × 1.5	D6	SS032O6NEX	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M32 × 1	D5	SS032M5NEX	2.5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M33 × 3.5	D9	SS033T9NEX	2.5P	7.087	1.732	-	3.622	1.108	0.831	1.062	4	5
M33 × 2	D7	SS033Q7NEX	2.5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	6
M33 × 1.5	D6	SS033O6NEX	2.5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	6
M33 × 1	D5	SS033M5NEX	2.5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	6

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Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

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

SP OX Spiral Fluted Taps, Oxidized

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M36 × 4	D9	SS036U9NEX	2.5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	5
M36 × 3	D8	SS036S8NEX	2.5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	5
M36 × 2	D7	SS036Q7NEX	2.5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	6
M36 × 1.5	D6	SS036O6NEX	2.5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	6
M36 × 1	D5	SS036M5NEX	2.5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	6
M39 × 4	D9	SS039U9NEX	2.5P	7.874	2.047	-	4.016	1.305	0.979	1.125	4	5
M39 × 3	D8	SS039S8NEX	2.5P	7.874	2.047	-	4.016	1.305	0.979	1.125	4	5
M39 × 2	D7	SS039Q7NEX	2.5P	7.874	1.142	-	4.016	1.305	0.979	1.125	4	6
M39 × 1.5	D6	SS039O6NEX	2.5P	7.874	1.142	-	4.016	1.305	0.979	1.125	4	6
M39 × 1	D5	SS039M5NEX	2.5P	7.874	1.142	-	4.016	1.305	0.979	1.125	4	6
M42 × 4.5	D10	SS042VONEX	2.5P	7.874	2.047	-	4.016	1.43	1.072	1.25	4	5
M42 × 2	D7	SS042Q7NEX	2.5P	7.874	1.142	-	4.016	1.43	1.072	1.25	4	6
M42 × 1.5	D6	SS042O6NEX	2.5P	7.874	1.142	-	4.016	1.43	1.072	1.25	4	6
M42 × 1	D5	SS042M5NEX	2.5P	7.874	1.142	-	4.016	1.43	1.072	1.25	4	6
M45 × 4.5	D10	SS045VONEX	2.5P	8.661	2.323	-	4.409	1.519	1.139	1.25	4	5
M45 × 3	D8	SS045S8NEX	2.5P	8.661	2.323	-	4.409	1.519	1.139	1.25	4	5
M45 × 2	D7	SS045Q7NEX	2.5P	8.661	1.22	-	4.409	1.519	1.139	1.25	4	6
M45 × 1.5	D6	SS045O6NEX	2.5P	8.661	1.22	-	4.409	1.519	1.139	1.25	4	6
M45 × 1	D5	SS045M5NEX	2.5P	8.661	1.22	-	4.409	1.519	1.139	1.25	4	6
M48 × 5	D11	SS048W-NEX	2.5P	9.843	2.559	-	5.039	1.644	1.233	1.375	4	5
M48 × 3	D9	SS048S9NEX	2.5P	9.843	2.559	-	5.039	1.644	1.233	1.375	4	5
M48 × 2	D7	SS048Q7NEX	2.5P	9.843	1.22	-	5.039	1.644	1.233	1.375	4	6
M48 × 1.5	D7	SS048O7NEX	2.5P	9.843	1.22	-	5.039	1.644	1.233	1.375	4	6
M48 × 1	D6	SS048M6NEX	2.5P	9.843	1.22	-	5.039	1.644	1.233	1.375	4	6
For Unified Threads												
No.2-56UNC	GH1	SSUN2E1NEX	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.2-56UNC	GH2	SSUN2E2NEX	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.2-64UNF	GH1	SSUN2D1NEX	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.2-64UNF	GH2	SSUN2D2NEX	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.3-48UNC	GH1	SSUN3F1NEX	2.5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.3-48UNC	GH2	SSUN3F2NEX	2.5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.3-56UNF	GH1	SSUN3E1NEX	2.5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.3-56UNF	GH2	SSUN3E2NEX	2.5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.4-40UNC	GH1	SSUN4H1NEX	2.5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.4-40UNC	GH2	SSUN4H2NEX	2.5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.4-48UNF	GH1	SSUN4F1NEX	2.5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.4-48UNF	GH2	SSUN4F2NEX	2.5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.5-40UNC	GH1	SSUN5H1NEX	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-40UNC	GH2	SSUN5H2NEX	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-44UNF	GH1	SSUN5G1NEX	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-44UNF	GH2	SSUN5G2NEX	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.6-32UNC	GH1	SSUN6J1NEX	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.6-32UNC	GH2	SSUN6J2NEX	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.6-32UNC	GH3	SSUN6J3NEX	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.6-32UNC	GH4	SSUN6J4NEX	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.6-40UNF	GH1	SSUN6H1NEX	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.6-40UNF	GH2	SSUN6H2NEX	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.8-32UNC	GH2	SSUN8J2NEX	2.5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	3	2
No.8-32UNC	GH3	SSUN8J3NEX	2.5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	3	2
No.8-36UNF	GH2	SSUN8I2NEX	2.5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	3	2

* This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
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ANSI

Spiral Fluted Taps
(for blind hole) ①

Spiral Fluted Taps
(for through hole) ②

Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫

ANSI

①-84

① Spiral Fluted Tap Series for blind hole

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

ANSI

SP OX Spiral Fluted Taps, Oxidized

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
No.8-36UNF	GH3	SSUN8I3NEX	2.5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	3	2
No.10-24UNC	GH2	SSUNAM2NEX	2.5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	3	2
No.10-24UNC	GH3	SSUNAM3NEX	2.5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	3	2
No.10-32UNF	GH2	SSUNAJ2NEX	2.5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	3	2
No.10-32UNF	GH3	SSUNAJ3NEX	2.5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	3	2
No.12-24UNC	GH2	SSUNCM2NEX	2.5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	3	2
No.12-24UNC	GH3	SSUNCM3NEX	2.5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	3	2
No.12-28UNF	GH2	SSUNCK2NEX	2.5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	3	2
No.12-28UNF	GH3	SSUNCK3NEX	2.5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	3	2
1/4-20UNC	GH2	SSU04N2NEX	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-20UNC	GH3	SSU04N3NEX	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-20UNC	GH5	SSU04N5NEX	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-20UNC	GH11	SSU04N-EEX	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH2	SSU04K2NEX	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	SSU04K3NEX	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	SSU04K4NEX	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH11	SSU04K-EEX	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
5/16-18UNC	GH2	SSU05O2NEX	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-18UNC	GH3	SSU05O3NEX	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-18UNC	GH5	SSU05O5NEX	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-18UNC	GH11	SSU05O-EEX	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH2	SSU05M2NEX	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	SSU05M3NEX	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	SSU05M4NEX	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH5	SSU05M5NEX	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH11	SSU05M-EEX	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	SSU06P3NEX	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-16UNC	GH4	SSU06P4NEX	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-16UNC	GH5	SSU06P5NEX	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-16UNC	GH11	SSU06P-EEX	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH2	SSU06M2NEX	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	SSU06M3NEX	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	SSU06M4NEX	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH11	SSU06M-EEX	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
7/16-14UNC	GH3	SSU07Q3NEX	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-14UNC	GH4	SSU07Q4NEX	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-14UNC	GH5	SSU07Q5NEX	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-20UNF	GH2	SSU07N2NEX	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-20UNF	GH3	SSU07N3NEX	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-20UNF	GH5	SSU07N5NEX	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
1/2-13UNC	GH3	SSU08R3NEX	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-13UNC	GH4	SSU08R4NEX	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-13UNC	GH5	SSU08R5NEX	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-13UNC	GH11	SSU08R-EEX	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH2	SSU08N2NEX	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH3	SSU08N3NEX	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH5	SSU08N5NEX	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH11	SSU08N-EEX	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
9/16-12UNC	GH3	SSU09S3NEX	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-12UNC	GH4	SSU09S4NEX	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5

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* This product is different from JIS products in shape and dimensions, please be careful when using.

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

SP OX Spiral Fluted Taps,Oxidized

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
9/16-12UNC	GH5	SSU09S5NEX	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-18UNF	GH3	SSU09O3NEX	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-18UNF	GH4	SSU09O4NEX	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-18UNF	GH5	SSU09O5NEX	2.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
5/8-11UNC	GH3	SSU10U3NEX	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-11UNC	GH4	SSU10U4NEX	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-11UNC	GH5	SSU10U5NEX	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-11UNC	GH11	SSU10U-EEX	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-18UNF	GH3	SSU10O3NEX	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-18UNF	GH4	SSU10O4NEX	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-18UNF	GH5	SSU10O5NEX	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-18UNF	GH11	SSU10O-EEX	2.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
3/4-10UNC	GH3	SSU12V3NEX	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
3/4-10UNC	GH5	SSU12V5NEX	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
3/4-10UNC	GH11	SSU12V-EEX	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
3/4-16UNF	GH3	SSU12P3NEX	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
3/4-16UNF	GH4	SSU12P4NEX	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
3/4-16UNF	GH5	SSU12P5NEX	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
3/4-16UNF	GH11	SSU12P-EEX	2.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	4	5
7/8-9UNC	GH4	SSU14W4NEX	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
7/8-9UNC	GH5	SSU14W5NEX	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
7/8-9UNC	GH6	SSU14W6NEX	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
7/8-14UNF	GH3	SSU14Q3NEX	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
7/8-14UNF	GH4	SSU14Q4NEX	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
7/8-14UNF	GH6	SSU14Q6NEX	2.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	4	5
1 -8UNC	GH4	SSU16X4NEX	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5
1 -8UNC	GH5	SSU16X5NEX	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5
1 -8UNC	GH6	SSU16X6NEX	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5
1 -12UNF	GH3	SSU16S3NEX	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5
1 -12UNF	GH4	SSU16S4NEX	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5
1 -12UNF	GH5	SSU16S5NEX	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5
1 -12UNF	GH6	SSU16S6NEX	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	5
1 1/8-7UNC	GH4	SSU18Y4NEX	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/8-7UNC	GH6	SSU18Y6NEX	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/8-12UNF	GH4	SSU18S4NEX	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/8-12UNF	GH5	SSU18S5NEX	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/4-7UNC	GH4	SSU20Y4NEX	2.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 1/4-7UNC	GH6	SSU20Y6NEX	2.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 1/4-12UNF	GH4	SSU20S4NEX	2.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 1/4-12UNF	GH5	SSU20S5NEX	2.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 3/8-6UNC	GH5	SSU22Z5NEX	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 3/8-6UNC	GH6	SSU22Z6NEX	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 3/8-12UNF	GH4	SSU22S4NEX	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 3/8-12UNF	GH5	SSU22S5NEX	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 1/2-6UNC	GH5	SSU24Z5NEX	2.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5
1 1/2-6UNC	GH6	SSU24Z6NEX	2.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5
1 1/2-12UNF	GH4	SSU24S4NEX	2.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5
1 1/2-12UNF	GH5	SSU24S5NEX	2.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5

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ANSI

Spiral Fluted Taps
(for blind hole) ①Spiral Fluted Taps
(for through hole) ②Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪Precision Machinery/
Medical Surgical Instruments ⑫

ANSI

①-86

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

SP OX

Spiral Fluted Taps, Oxidized



Specification

HSS

OX

Oxide



Tapping Speeds depending on Materials

Low carbon steels
低炭素鋼
5~10
(m/min)

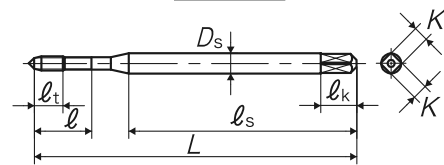
Medium carbon steels
中炭素鋼
5~10
(m/min)

High carbon steels
高炭素鋼
5~10
(m/min)

■ The SP OX is a spiral flute tap for blind hole tapping. These taps have an applied oxidation treatment to prevent chip welding on the surface of the taps threaded portion. They are suitable for thread processing of soft steel materials where the chips easily weld to the tap like low carbon.

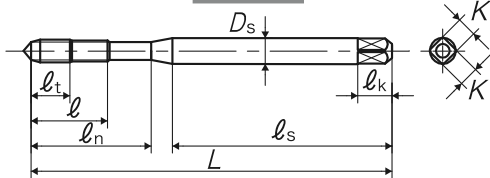
TYPE: 1

DIN371



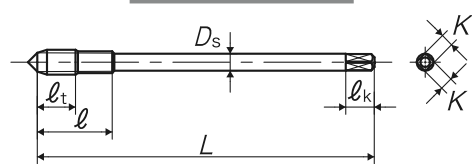
TYPE: 2

DIN371



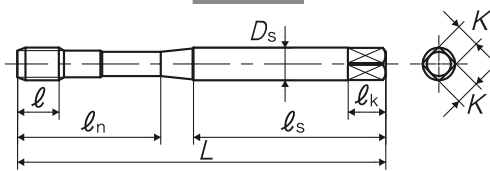
TYPE: 3

DIN376/DIN374



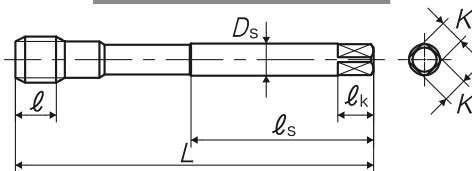
TYPE: 4

DIN371



TYPE: 5

DIN376/DIN374/DIN5156



①-87

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

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

Segment : 1D (G=1H)

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
For Metric Threads													
M2 × 0.4	ISO2	SD2.0EANEX	2.5P	45	4	8	-	32	2.8	2.1	5	2	1
M2.2 × 0.45	ISO2	SD2.2FANEX	2.5P	45	4	9	-	32	2.8	2.1	5	2	1
M2.3 × 0.4	ISO2	SD2.3EANEX	2.5P	45	4	9	-	32	2.8	2.1	5	2	1
M2.5 × 0.45	ISO2	SD2.5FANEX	2.5P	50	4	8	15	33	2.8	2.1	5	2	2
M2.6 × 0.45	ISO2	SD2.6FANEX	2.5P	50	4	8	15	33	2.8	2.1	5	2	2
M3 × 0.5	ISO2	SD3.0GANEX	2.5P	56	5	9	18	34	3.5	2.7	6	3	2
M3 × 0.5	ISO3	SD3.0GMNEX	2.5P	56	5	9	18	34	3.5	2.7	6	3	2
M3.5 × 0.6	ISO2	SD3.5HANEX	2.5P	56	7	11	20	32	4	3	6	3	2
M4 × 0.7	ISO2	SD4.0IANEX	2.5P	63	7	13	21	38	4.5	3.4	6	3	2
M4 × 0.7	ISO2	SG4.0IANEX	2.5P	63	7	13	-	-	2.8	2.1	5	3	3
M4 × 0.7	ISO3	SD4.0IMNEX	2.5P	63	7	13	21	38	4.5	3.4	6	3	2
M4 × 0.5	ISO2	SM4.0GANEX	2.5P	63	5	13	-	-	2.8	2.1	5	3	3
M4.5 × 0.75	ISO2	SD4.5JANEX	2.5P	70	9	14	24	39	6	4.9	8	3	2
M5 × 0.8	ISO2	SD5.0KANEX	2.5P	70	9	14	25	39	6	4.9	8	3	2
M5 × 0.8	ISO2	SG5.0KANEX	2.5P	70	9	14	-	-	3.5	2.7	6	3	3
M5 × 0.8	ISO3	SD5.0KMNEX	2.5P	70	9	14	25	39	6	4.9	8	3	2
M5 × 0.5	ISO2	SM5.0GANEX	2.5P	70	6	11	-	-	3.5	2.7	6	3	3
M6 × 1	ISO2	SD6.0MANEX	2.5P	80	11	15	30	45	6	4.9	8	3	2
M6 × 1	ISO2	SG6.0MANEX	2.5P	80	11	15	-	-	4.5	3.4	6	3	3
M6 × 1	ISO3	SD6.0MMNEX	2.5P	80	11	15	30	45	6	4.9	8	3	2
M6 × 0.75	ISO2	SM6.0JANEX	2.5P	80	8	13	-	-	4.5	3.4	6	3	3
M6 × 0.5	ISO2	SM6.0GANEX	2.5P	80	8	13	-	-	4.5	3.4	6	3	3
M7 × 1	ISO2	SD7.0MANEX	2.5P	80	-	11	30	45	7	5.5	8	3	4
M7 × 0.75	ISO2	SM7.0JANEX	2.5P	80	-	8	-	41	5.5	4.3	7	3	5
M7 × 0.5	ISO2	SM7.0GANEX	2.5P	80	-	8	-	41	5.5	4.3	7	3	5
M8 × 1.25	ISO2	SD8.0NANEX	2.5P	90	-	12	35	47	8	6.2	9	3	4
M8 × 1.25	ISO2	SG8.0NANEX	2.5P	90	-	12	-	46	6	4.9	8	3	5
M8 × 1.25	ISO3	SD8.0NMNEX	2.5P	90	-	12	35	47	8	6.2	9	3	4
M8 × 1	ISO2	SM8.0MANEX	2.5P	90	-	12	-	46	6	4.9	8	3	5
M8 × 0.75	ISO2	SM8.0JANEX	2.5P	80	-	12	-	41	6	4.9	8	3	5
M8 × 0.5	ISO2	SM8.0GANEX	2.5P	80	-	10	-	41	6	4.9	8	3	5
M9 × 1.25	ISO2	SG9.0NANEX	2.5P	90	-	12	-	46	7	5.5	8	3	5
M9 × 1.25	ISO2	SD9.0NANEX	2.5P	90	-	12	35	48	9	7	10	3	4
M9 × 1.25	ISO3	SD9.0NMNEX	2.5P	90	-	12	35	48	9	7	10	3	4
M9 × 1	ISO2	SM9.0MANEX	2.5P	90	-	12	-	46	7	5.5	8	3	5
M10 × 1.5	ISO2	SD010OANEX	2.5P	100	-	13	39	52.5	10	8	11	3	4
M10 × 1.5	ISO2	SG010OANEX	2.5P	100	-	13	-	51	7	5.5	8	3	5
M10 × 1.5	ISO3	SD010OMNEX	2.5P	100	-	13	39	52.5	10	8	11	3	4
M10 × 1.25	ISO2	SM010NANEX	2.5P	100	-	13	-	51	7	5.5	8	3	5
M10 × 1	ISO2	SM010MANEX	2.5P	90	-	13	-	46	7	5.5	8	3	5
M10 × 0.75	ISO2	SM010JANEX	2.5P	90	-	13	-	46	7	5.5	8	3	5
M11 × 1.5	ISO2	SG011OANEX	2.5P	100	-	13	-	51	8	6.2	9	3	5
M12 × 1.75	ISO2	SG012PANEX	2.5P	110	-	15	-	56	9	7	10	3	5
M12 × 1.75	ISO3	SG012PMNEX	2.5P	110	-	15	-	56	9	7	10	3	5
M12 × 1.5	ISO2	SM012OANEX	2.5P	100	-	15	-	51	9	7	10	3	5
M12 × 1.25	ISO2	SM012NANEX	2.5P	100	-	15	-	51	9	7	10	3	5
M12 × 1	ISO2	SM012MANEX	2.5P	100	-	15	-	51	9	7	10	3	5
M14 × 2	ISO2	SG014QANEX	2.5P	110	-	18	-	56	11	9	12	3	5
M14 × 2	ISO3	SG014QMNEX	2.5P	110	-	18	-	56	11	9	12	3	5

· This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

1

DIN

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

DIN

①-88

① Spiral Fluted Tap Series for blind hole

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

DIN

SP OX Spiral Fluted Taps, Oxidized

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M14 × 1.5	ISO2	SM014OANEX	2.5P	100	-	14	-	51	11	9	12	3	5
M14 × 1.25	ISO2	SM014NANEX	2.5P	100	-	14	-	51	11	9	12	3	5
M14 × 1	ISO2	SM014MANEX	2.5P	100	-	14	-	51	11	9	12	3	5
M16 × 2	ISO2	SG016QANEX	2.5P	110	-	18	-	56	12	9	12	3	5
M16 × 2	ISO3	SG016QMEX	2.5P	110	-	18	-	56	12	9	12	3	5
M16 × 1.5	ISO2	SM016OANEX	2.5P	100	-	14	-	51	12	9	12	3	5
M16 × 1	ISO2	SM016MANEX	2.5P	100	-	14	-	51	12	9	12	3	5
M18 × 2.5	ISO2	SG018RANEX	2.5P	125	-	20	-	64	14	11	14	4	5
M18 × 2	ISO2	SM018QANEX	2.5P	125	-	18	-	64	14	11	14	4	5
M18 × 1.5	ISO2	SM018OANEX	2.5P	110	-	14	-	56	14	11	14	4	5
M18 × 1	ISO2	SM018MANEX	2.5P	110	-	14	-	56	14	11	14	4	5
M20 × 2.5	ISO2	SG020RANEX	2.5P	140	-	20	-	71	16	12	15	4	5
M20 × 2	ISO2	SM020QANEX	2.5P	140	-	18	-	71	16	12	15	4	5
M20 × 1.5	ISO2	SM020OANEX	2.5P	125	-	14	-	64	16	12	15	4	5
M20 × 1	ISO2	SM020MANEX	2.5P	125	-	14	-	64	16	12	15	4	5
M22 × 2.5	ISO2	SG022RANEX	2.5P	140	-	20	-	71	18	14.5	17	4	5
M22 × 2	ISO2	SM022QANEX	2.5P	140	-	18	-	71	18	14.5	17	4	5
M22 × 1.5	ISO2	SM022OANEX	2.5P	125	-	14	-	64	18	14.5	17	4	5
M22 × 1	ISO2	SM022MANEX	2.5P	125	-	14	-	64	18	14.5	17	4	5
M24 × 3	ISO2	SG024SANEX	2.5P	160	-	25	-	82	18	14.5	17	4	5
M24 × 2	ISO2	SM024QANEX	2.5P	140	-	18	-	71	18	14.5	17	4	5
M24 × 1.5	ISO2	SM024OANEX	2.5P	140	-	18	-	71	18	14.5	17	4	5
M24 × 1	ISO2	SM024MANEX	2.5P	140	-	18	-	71	18	14.5	17	4	5
M25 × 1.5	ISO2	SM025OANEX	2.5P	140	-	18	-	71	18	14.5	17	4	5
M26 × 1.5	ISO2	SM026OANEX	2.5P	140	-	18	-	71	18	14.5	17	4	5
M27 × 3	ISO2	SG027SANEX	2.5P	160	-	25	-	82	20	16	19	4	5
M27 × 2	ISO2	SM027QANEX	2.5P	140	-	20	-	71	20	16	19	4	5
M27 × 1.5	ISO2	SM027OANEX	2.5P	140	-	20	-	71	20	16	19	4	5
M27 × 1	ISO2	SM027MANEX	2.5P	140	-	20	-	71	20	16	19	4	5
M28 × 2	ISO2	SM028QANEX	2.5P	140	-	20	-	71	20	16	19	4	5
M28 × 1.5	ISO2	SM028OANEX	2.5P	140	-	20	-	71	20	16	19	4	5
M28 × 1	ISO2	SM028MANEX	2.5P	140	-	20	-	71	20	16	19	4	5
M30 × 3.5	ISO2	SG030TANEX	2.5P	180	-	30	-	92	22	18	21	4	5
M30 × 2	ISO2	SM030QANEX	2.5P	150	-	20	-	77	22	18	21	4	5
M30 × 1.5	ISO2	SM030OANEX	2.5P	150	-	20	-	77	22	18	21	4	5
M30 × 1	ISO2	SM030MANEX	2.5P	150	-	20	-	77	22	18	21	4	5
M32 × 2	ISO2	SM032QANEX	2.5P	150	-	20	-	77	22	18	21	4	5
M32 × 1.5	ISO2	SM032OANEX	2.5P	150	-	20	-	77	22	18	21	4	5
M32 × 1	ISO2	SM032MANEX	2.5P	150	-	20	-	77	22	18	21	4	5
M33 × 3.5	ISO2	SG033TANEX	2.5P	180	-	30	-	92	25	20	23	4	5
M33 × 2	ISO2	SM033QANEX	2.5P	160	-	20	-	82	25	20	23	4	5
M33 × 1.5	ISO2	SM033OANEX	2.5P	160	-	20	-	82	25	20	23	4	5
M33 × 1	ISO2	SM033MANEX	2.5P	160	-	20	-	82	25	20	23	4	5
M35 × 1.5	ISO2	SM035OANEX	2.5P	170	-	20	-	87	28	22	25	4	5
M36 × 4	ISO2	SG036UANEX	2.5P	200	-	40	-	102	28	22	25	4	5
M36 × 3	ISO2	SM036SANEX	2.5P	200	-	30	-	102	28	22	25	4	5
M36 × 2	ISO2	SM036QANEX	2.5P	170	-	20	-	87	28	22	25	4	5
M36 × 1.5	ISO2	SM036OANEX	2.5P	170	-	20	-	87	28	22	25	4	5
M36 × 1	ISO2	SM036MANEX	2.5P	170	-	20	-	87	28	22	25	4	5
M39 × 4	ISO2	SG039UANEX	2.5P	200	-	40	-	102	32	24	27	4	5

DIN

①-89

Think threads with
YAMAWA

This product is different from JIS products in shape and dimensions, please be careful when using.

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,Oxidized

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M39 × 2	ISO2	SM039QANEX	2.5P	170	-	20	-	87	32	24	27	4	5
M39 × 1.5	ISO2	SM039OANEX	2.5P	170	-	20	-	87	32	24	27	4	5
M39 × 1	ISO2	SM039MANEX	2.5P	170	-	20	-	87	32	24	27	4	5
M42 × 4.5	ISO2	SG042VANEX	2.5P	200	-	40	-	102	32	24	27	4	5
M42 × 2	ISO2	SM042QANEX	2.5P	170	-	20	-	87	32	24	27	4	5
M42 × 1.5	ISO2	SM042OANEX	2.5P	170	-	20	-	87	32	24	27	4	5
M42 × 1	ISO2	SM042MANEX	2.5P	170	-	20	-	87	32	24	27	4	5
M45 × 4.5	ISO2	SG045VANEX	2.5P	220	-	45	-	112	36	29	32	4	5
M45 × 3	ISO2	SM045SANEX	2.5P	200	-	40	-	102	36	29	32	4	5
M45 × 2	ISO2	SM045QANEX	2.5P	180	-	25	-	92	36	29	32	4	5
M45 × 1.5	ISO2	SM045OANEX	2.5P	180	-	25	-	92	36	29	32	4	5
M45 × 1	ISO2	SM045MANEX	2.5P	180	-	25	-	92	36	29	32	4	5
M48 × 5	ISO2	SG048WANEX	2.5P	250	-	45	-	128	36	29	32	4	5
M48 × 3	ISO2	SM048SANEX	2.5P	225	-	40	-	115	36	29	32	4	5
M48 × 2	ISO2	SM048QANEX	2.5P	190	-	25	-	97	36	29	32	4	5
M48 × 1.5	ISO2	SM048OANEX	2.5P	190	-	25	-	97	36	29	32	4	5
M48 × 1	ISO2	SM048MANEX	2.5P	190	-	25	-	97	36	29	32	4	5
For Unified Threads													
No.4-40UNC	2B	SDUN4HXNEX	2.5P	56	5	9	18	34	3.5	2.7	6	2	2
No.4-48UNF	2B	SDUN4FXNEX	2.5P	56	5	9	18	34	3.5	2.7	6	2	2
No.5-40UNC	2B	SDUN5HXNEX	2.5P	56	5	11	18	34	3.5	2.7	6	3	2
No.5-44UNF	2B	SDUN5GXNEX	2.5P	56	5	11	18	34	3.5	2.7	6	3	2
No.6-32UNC	2B	SDUN6JXNEX	2.5P	56	7	11	19	32	4	3	6	3	2
No.6-40UNF	2B	SDUN6HXNEX	2.5P	56	7	11	19	32	4	3	6	3	2
No.8-32UNC	2B	SDUN8JXNEX	2.5P	63	7	13	21	38	4.5	3.4	6	3	2
No.8-36UNF	2B	SDUN8IXNEX	2.5P	63	7	13	21	38	4.5	3.4	6	3	2
No.10-24UNC	2B	SDUNAMXNEX	2.5P	70	9	14	24	39	6	4.9	8	3	2
No.10-32UNF	2B	SDUNAJXNEX	2.5P	70	9	14	24	39	6	4.9	8	3	2
No.12-24UNC	2B	SDUNCMXNEX	2.5P	80	9	15	28	45	6	4.9	8	3	2
No.12-28UNF	2B	SDUNCKXNEX	2.5P	80	9	15	28	45	6	4.9	8	3	2
1/4-20UNC	2B	SDU04NXNEX	2.5P	80	11	15	30	42	7	5.5	8	3	2
1/4-28UNF	2B	SDU04KXNEX	2.5P	80	11	15	30	42	7	5.5	8	3	2
5/16-18UNC	2B	SDU05OXNEX	2.5P	90	-	12	35	47	8	6.2	9	3	4
5/16-24UNF	2B	SMU05MXNEX	2.5P	90	-	12	-	46	6	4.9	8	3	5
3/8-16UNC	2B	SDU06PXNEX	2.5P	100	-	13	39	54.5	9	7	10	3	4
3/8-24UNF	2B	SMU06MXNEX	2.5P	100	-	13	-	51	7	5.5	8	3	5
7/16-14UNC	2B	SGU07QXNEX	2.5P	100	-	13	-	51	8	6.2	9	3	5
7/16-20UNF	2B	SMU07NXNEX	2.5P	100	-	13	-	51	8	6.2	9	3	5
1/2-13UNC	2B	SGU08RXNEX	2.5P	110	-	15	-	56	9	7	10	3	5
1/2-20UNF	2B	SMU08NXNEX	2.5P	100	-	15	-	51	9	7	10	3	5
9/16-12UNC	2B	SGU09SXNEX	2.5P	110	-	18	-	56	11	9	12	3	5
9/16-18UNF	2B	SMU09OXNEX	2.5P	100	-	14	-	51	11	9	12	3	5
5/8-11UNC	2B	SGU10UXNEX	2.5P	110	-	18	-	56	12	9	12	3	5
5/8-18UNF	2B	SMU10OXNEX	2.5P	100	-	14	-	51	12	9	12	3	5
3/4-10UNC	2B	SGU12VXNEX	2.5P	125	-	20	-	64	14	11	14	4	5
3/4-16UNF	2B	SMU12PXNEX	2.5P	110	-	14	-	56	14	11	14	4	5
7/8-9UNC	2B	SGU14WXNEX	2.5P	140	-	20	-	71	18	14.5	17	4	5
7/8-14UNF	2B	SMU14QXNEX	2.5P	125	-	20	-	64	18	14.5	17	4	5
1-8UNC	2B	SGU16XXNEX	2.5P	160	-	25	-	82	18	14.5	17	4	5
1 -12UNF	2B	SMU16SXNEX	2.5P	140	-	18	-	71	18	14.5	17	4	5

· This product is different from JIS products in shape and dimensions, please be careful when using.

 Think threads with
YAMAWA

1

DIN

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

DIN

①-90

① Spiral Fluted Tap Series for blind hole

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

DIN

SP OX Spiral Fluted Taps, Oxidized

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
1 1/8-7UNC	2B	SGU18YXNEX	2.5P	180	-	30	-	92	22	18	21	4	5
1 1/8-12UNF	2B	SMU18SXNEX	2.5P	150	-	20	-	77	22	18	21	4	5
1 1/4-7UNC	2B	SGU20YXNEX	2.5P	180	-	30	-	92	22	18	21	4	5
1 1/4-12UNF	2B	SMU20SXNEX	2.5P	150	-	20	-	77	22	18	21	4	5
1 3/8-6UNC	2B	SGU22ZXNEX	2.5P	200	-	40	-	102	28	22	25	4	5
1 3/8-12UNF	2B	SMU22SXNEX	2.5P	170	-	20	-	87	28	20	23	4	5
1 1/2-6UNC	2B	SGU24ZXNEX	2.5P	200	-	40	-	102	32	24	27	4	5
1 1/2-12UNF	2B	SMU24SXNEX	2.5P	170	-	20	-	87	32	24	27	4	5
1 3/4-5UNC	2B	SGU280XNEX	2.5P	220	-	45	-	112	36	29	32	4	5
1 3/4-12UN	2B	SMU28SXNEX	2.5P	180	-	20	-	92	36	29	32	4	5
For G Threads													
G 1/16-28	-	SVG0010NEX	2.5P	90	-	12	-	46	6	4.9	8	3	5
G 1/8-28	-	SVG0020NEX	2.5P	90	-	12	-	46	7	5.5	8	3	5
G 1/4-19	-	SVG0040NEX	2.5P	100	-	14	-	51	11	9	12	3	5
G 3/8-19	-	SVG0060NEX	2.5P	100	-	14	-	51	12	9	12	3	5
G 1/2-14	-	SVG0080NEX	2.5P	125	-	18	-	64	16	12	15	4	5
G 5/8-14	-	SVG0100NEX	2.5P	125	-	18	-	64	18	14.5	17	4	5
G 3/4-14	-	SVG0120NEX	2.5P	140	-	20	-	71	20	16	19	4	5
G 7/8-14	-	SVG0140NEX	2.5P	150	-	20	-	77	22	18	21	4	5
G 1 -11	-	SVG0160NEX	2.5P	160	-	20	-	82	25	20	23	4	5
G 1 1/8-11	-	SVG0180NEX	2.5P	170	-	20	-	87	28	22	25	4	5
G 1 1/4-11	-	SVG0200NEX	2.5P	170	-	20	-	87	32	24	27	4	5
G 1 1/2-11	-	SVG0240NEX	2.5P	190	-	25	-	97	36	29	32	4	5

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-91

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

Spiral Fluted Tap Series for blind hole

ANSI

SP

Spiral Fluted Taps for Alloy Steels



Specification

HSS

OX
Oxide



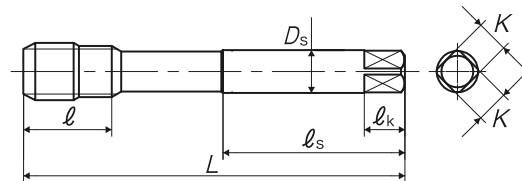
Tapping Speed depending on Materials

Alloy steels
合金鋼
5~10
(m/min)

High carbon steels
高炭素鋼
5~10
(m/min)

■SP taps are spiral flute taps for alloy steel and high carbon steel. They have an improved chip discharge performance and are ideal for reducing tapping torque. They are also ideal for large diameter blind hole tapping.

TYPE: 1



Segment : 1C

Size	Class	Code	Chamfer	L (inch)	l (inch)	ln (inch)	ls (inch)	Ds (inch)	K (inch)	lk (inch)	No. of flutes	TYPE
For Unified Threads												
1 -8UNC	2BX	SSU16XYEEXJ	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	1
1 1/8-8UN	2BX	SSU18XYEEXJ	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	1
1 1/4-8UN	2BX	SSU20XYEEXJ	2.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	1
1 3/8-8UN	2BX	SSU22XYEEXJ	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	1
1 1/2-8UN	2BX	SSU24XYEEXJ	2.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	1

1

ANSI

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

ANSI

①-92

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

⑬

⑭

⑮

⑯

⑰

⑱

SP LH

Spiral Fluted Taps for Left Hand Threads



Specification

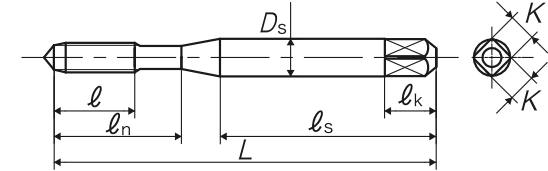


Tapping Speeds depending on Materials

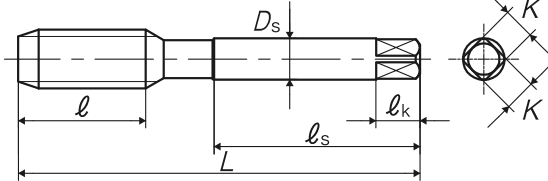
Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼
5~10 (m/min)	5~10 (m/min)

■The SP LH is a spiral flute tap for tapping left hand thread blind holes.

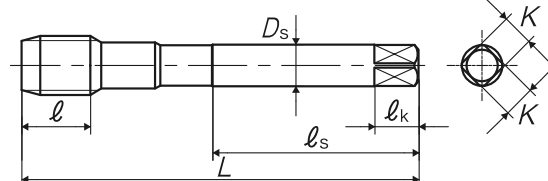
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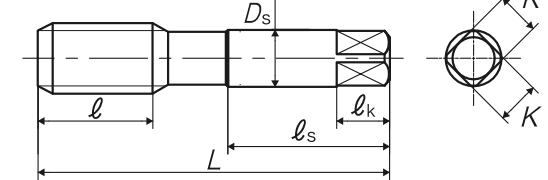
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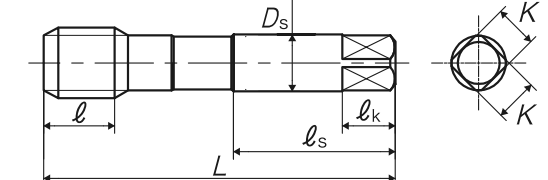
TYPE: 3



TYPE: 4



TYPE: 5



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	MSRP
For Metric Threads													
M2 × 0.4	P1	SPP2.0E-L	2.5P	42	7.2	12	27	3	2.5	5	2	1	¥ 3,680 ※
M2.3 × 0.4	P1	SPP2.3E-L	2.5P	42	7.2	12	27	3	2.5	5	2	1	¥ 3,350 ※
M2.5 × 0.45	P1	SPP2.5F-L	2.5P	46	8.1	14	29	3	2.5	5	2	1	¥ 2,810 ※
M2.6 × 0.45	P1	SPP2.6F-L	2.5P	46	8.1	14	29	3	2.5	5	2	1	¥ 2,810 ※
M3 × 0.5	P1	SPP3.0G-L	2.5P	46	9	14	26	4	3.2	6	3	1	¥ 1,970
M4 × 0.7	P2	SPQ4.0I-L	2.5P	52	11	17	29	5	4	7	3	1	¥ 1,970
M5 × 0.8	P2	SPQ5.0K-L	2.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 2,000
M6 × 1	P2	SPQ6.0M-L	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 2,190
M7 × 1	P2	SPQ7.0M-L	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 2,620 ※
M8 × 1.25	P2	SPQ8.0N-L	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 3,000
M8 × 1	P2	SPQ8.0M-L	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 3,410 ※
M10 × 1.5	P2	SPQ010O-L	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,820
M10 × 1.25	P2	SPQ010N-L	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,820
M10 × 1	P2	SPQ010M-L	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 4,530 ※
M12 × 1.75	P2	SPQ012P-L	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,400
M12 × 1.5	P2	SPQ012O-L	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,400 ※
M12 × 1.25	P2	SPQ012N-L	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,400 ※

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

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

1

JIS

Spiral Fluted Taps
(for blind hole) ①Spiral Fluted Taps
(for through hole) ②Spiral Pointed Taps
(for through hole) ③Hand Taps
④Cemented
Carbide Taps ⑤Roll Taps
⑥Special Thread Taps
Simple Inspection Tools ⑦Pipe Taps
⑧Thread Mills
Premium Thread Mills ⑨Dies
⑩Center Drills
Centering Tools ⑪Precision Machinery/
Medical Surgical Instruments ⑫

JIS

①-94

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M12 × 1	P2	SPQ012M-L	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,360 ※
M14 × 2	P2	SPQ014Q-L	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 7,370 ※
M14 × 1.5	P2	SPQ014O-L	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 7,370 ※
M14 × 1	P2	SPQ014M-L	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 8,560 ※
M16 × 2	P2	SPQ016Q-L	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 9,860
M16 × 1.5	P2	SPQ016O-L	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 9,860 ※
M16 × 1	P2	SPQ016M-L	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 11,800 ※
M18 × 2.5	P3	SPR018R-L	2.5P	100	33	-	51	14	11	14	4	2	¥ 13,200 ※
M18 × 2	P3	SPR018Q-L	2.5P	100	33	-	51	14	11	14	4	2	¥ 13,200 ※
M18 × 1.5	P2	SPQ018O-L	2.5P	100	33	-	51	14	11	14	4	2	¥ 13,200 ※
M18 × 1	P2	SPQ018M-L	2.5P	100	18	-	51	14	11	14	4	3	¥ 17,100 ※
M20 × 2.5	P3	SPR020R-L	2.5P	105	33	-	50	15	12	15	4	4	¥ 18,000
M20 × 1.5	P3	SPR020O-L	2.5P	105	33	-	50	15	12	15	4	4	¥ 18,000 ※
M20 × 1	P2	SPQ020M-L	2.5P	105	18	-	50	15	12	15	4	5	¥ 22,800 ※
M22 × 2.5	P3	SPR022R-L	2.5P	115	33	-	55	17	13	16	4	4	¥ 23,100 ※
M22 × 1.5	P3	SPR022O-L	2.5P	115	33	-	55	17	13	16	4	4	¥ 23,100 ※
M24 × 3	P3	SPR024S-L	2.5P	120	39	-	55	19	15	18	4	4	¥ 28,600
M24 × 2	P3	SPR024Q-L	2.5P	120	39	-	55	19	15	18	4	4	¥ 28,600 ※
M24 × 1.5	P3	SPR024O-L	2.5P	120	39	-	55	19	15	18	4	4	¥ 28,600 ※
M27 × 3	P3	SPR027S-L	2.5P	130	39	-	60	20	15	18	4	4	¥ 39,900 ※
M27 × 1.5	P3	SPR027O-L	2.5P	130	39	-	60	20	15	18	4	4	¥ 39,900 ※
M30 × 3.5	P4	SPS030T-L	2.5P	135	46	-	62	23	17	20	4	4	¥ 50,800 ※
M30 × 2	P3	SPR030Q-L	2.5P	135	46	-	62	23	17	20	4	4	¥ 50,800 ※
M30 × 1.5	P3	SPR030O-L	2.5P	135	46	-	62	23	17	20	4	4	¥ 50,800 ※
For Unified Threads													
1/4-20UNC	P2	SPQU04N-L	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 2,500 ※
1/4-28UNF	P2	SPQU04K-L	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 2,500 ※
5/16-18UNC	P2	SPQU05O-L	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 3,460 ※
5/16-24UNF	P2	SPQU05M-L	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 3,460 ※
3/8-16UNC	P2	SPQU06P-L	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 4,420 ※
3/8-24UNF	P2	SPQU06M-L	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 4,420 ※
7/16-14UNC	P3	SPRU07Q-L	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,230 ※
7/16-20UNF	P2	SPQU07N-L	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,230 ※
1/2-13UNC	P3	SPRU08R-L	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 6,600 ※
1/2-20UNF	P2	SPQU08N-L	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 6,600 ※
5/8-11UNC	P3	SPRU10U-L	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 9,860 ※
5/8-18UNF	P2	SPQU10O-L	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 9,860 ※
3/4-10UNC	P3	SPRU12V-L	2.5P	105	33	-	50	15	12	15	4	4	¥ 18,000 ※
3/4-16UNF	P3	SPRU12P-L	2.5P	105	33	-	50	15	12	15	4	4	¥ 18,000 ※
7/8-9UNC	P3	SPRU14W-L	2.5P	115	33	-	55	17	13	16	4	4	¥ 25,400 ※
7/8-14UNF	P3	SPRU14Q-L	2.5P	115	33	-	55	17	13	16	4	4	¥ 25,400 ※
1 -8UNC	P3	SPRU16X-L	2.5P	125	39	-	58	19	15	18	4	4	¥ 37,100 ※
1 -12UNF	P3	SPRU16S-L	2.5P	125	39	-	58	19	15	18	4	4	¥ 37,100 ※
For Whitworth Threads													
1/4W20	P2	SPQW04N-L	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 2,500 ※
5/16W18	P2	SPQW05O-L	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 3,460 ※
3/8W16	P2	SPQW06P-L	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 4,420 ※
7/16W14	P3	SPRW07Q-L	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,230 ※
1/2W12	P3	SPRW08S-L	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 6,600 ※
5/8W11	P3	SPRW10U-L	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 9,860 ※
3/4W10	P3	SPRW12V-L	2.5P	105	33	-	50	15	12	15	4	4	¥ 18,000 ※

※ = Specified Distribution Items. Made to order products.

 Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

SP LH

Spiral Fluted Taps for Left Hand Threads



Specification

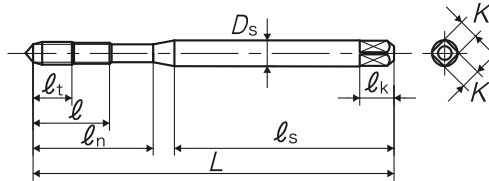


■ The SP LH is a spiral flute tap for tapping left hand thread blind holes.

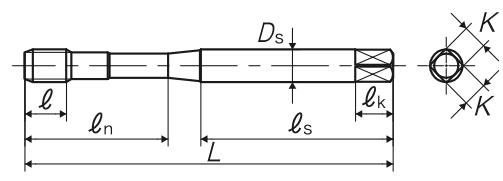
Tapping Speeds depending on Materials

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

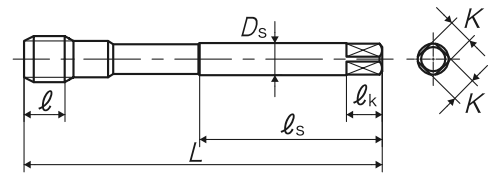
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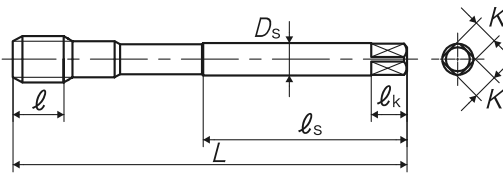
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TYPE:3



TYPE:4



Segment : 1D

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
For Metric Threads													
M4 × 0.7	ISO2	HD4.0IANEB	2.5P	63	7	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2	HD5.0KANEB	2.5P	70	9	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2	HD6.0MANEB	2.5P	80	11	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2	HD8.0NANEB	2.5P	90	-	12	35	47	8	6.2	9	3	2
M8 × 1	ISO2	HM8.0MANEB	2.5P	90	-	12	-	46	6	4.9	8	3	3
M10 × 1.5	ISO2	HD10.0OANEB	2.5P	100	-	13	39	52.5	10	8	11	3	2
M12 × 1.75	ISO2	HG012PANEB	2.5P	110	-	15	-	56	9	7	10	3	4
M14 × 2	ISO2	HG014QANEB	2.5P	110	-	18	-	56	11	9	12	3	4
M14 × 1.5	ISO2	HM014OANEB	2.5P	100	-	14	-	51	11	9	12	3	3
M16 × 2	ISO2	HG016QANEB	2.5P	110	-	18	-	56	12	9	12	3	4
M16 × 1.5	ISO2	HM016OANEB	2.5P	100	-	14	-	51	12	9	12	3	3
M18 × 2.5	ISO2	HG018RANEB	2.5P	125	-	20	-	64	14	11	14	4	4
M20 × 2.5	ISO2	HG020RANEB	2.5P	140	-	20	-	71	16	12	15	4	4

DIN

①-95

Think threads with
YAMAWA

・ This product is different from JIS products in shape and dimensions, please be careful when using.

Spiral Fluted Tap Series for blind hole

DIN

SP V

Spiral Fluted Taps, Coated



Specification



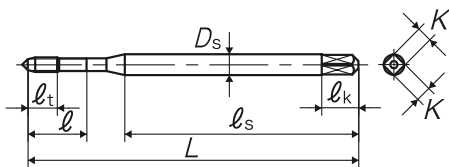
■ This is a coated spiral fluted tap for blind holes.

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)

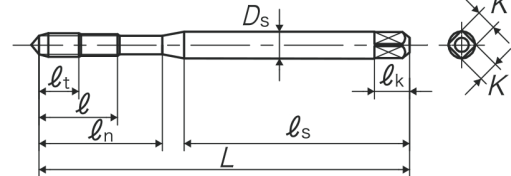
TYPE: 1

DIN371



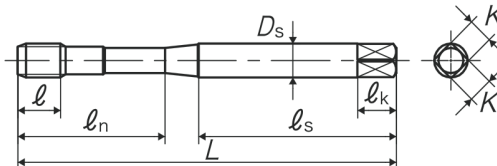
TYPE: 2

DIN371



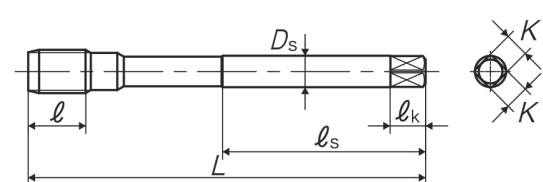
TYPE: 3

DIN371



TYPE: 4

DIN376/DIN374/DIN5156



Segment: 1D (G=1H)

Size	Class	Code	Chamfer	L (mm)	lt (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	TYPE
For Metric Threads													
M2 × 0.4	ISO2	96402.0TI	2.5P	45	4	8	-	32	2.8	2.1	5	2	1
M3 × 0.5	ISO2	96403.0TI	2.5P	56	5	9	18	34	3.5	2.7	6	3	2
M4 × 0.7	ISO2	96404.0TI	2.5P	63	7	13	21	38	4.5	3.4	6	3	2
M5 × 0.8	ISO2	96405.0TI	2.5P	70	9	14	25	39	6	4.9	8	3	2
M6 × 1	ISO2	96406.0TI	2.5P	80	11	15	30	45	6	4.9	8	3	2
M8 × 1.25	ISO2	96408.0TI	2.5P	90	-	12	35	47	8	6.2	9	3	3
M8 × 1	ISO2	98408.0MTI	2.5P	90	-	12	-	46	6	4.9	8	3	4
M10 × 1.5	ISO2	9640010TI	2.5P	100	-	13	39	52.5	10	8	11	3	3
M10 × 1.25	ISO2	9840010NTI	2.5P	100	-	13	-	51	7	5.5	8	3	4
M10 × 1	ISO2	9840010MTI	2.5P	90	-	13	-	46	7	5.5	8	3	4
M12 × 1.75	ISO2	9740012TI	2.5P	110	-	15	-	56	9	7	10	3	4
M12 × 1.5	ISO2	9840012OTI	2.5P	100	-	15	-	51	9	7	10	3	4
M12 × 1.25	ISO2	9840012NTI	2.5P	100	-	15	-	51	9	7	10	3	4
M14 × 2	ISO2	9740014TI	2.5P	110	-	18	-	56	11	9	12	3	4
M14 × 1.5	ISO2	9840014OTI	2.5P	100	-	14	-	51	11	9	12	3	4
M16 × 2	ISO2	9740016TI	2.5P	110	-	18	-	56	12	9	12	3	4
M16 × 1.5	ISO2	9840016OTI	2.5P	100	-	14	-	51	12	9	12	3	4

• This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

1

DIN

Spiral Fluted Taps
(for blind hole)

1

Spiral Fluted Taps
(for through hole)

2

Spiral Pointed Taps
(for through hole)

3

Hand Taps

4

Cemented
Carbide Taps

5

Roll Taps

6

Special Thread Taps
Simple Inspection Tools

7

Pipe Taps

8

Thread Mills
Premium Thread Mills

9

Dies

10

Center Drills
Centering Tools

11

Precision Machinery/
Medical Surgical Instruments

12

DIN

1-96

① Spiral Fluted Tap Series for blind hole

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

DIN

SP V Spiral Fluted Taps, Coated

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M18 × 2.5	ISO2	9740018TI	2.5P	125	-	20	-	64	14	11	14	4	4
M18 × 1.5	ISO2	9840018OTI	2.5P	110	-	14	-	56	14	11	14	4	4
M20 × 2.5	ISO2	9740020TI	2.5P	140	-	20	-	71	16	12	15	4	4
M20 × 1.5	ISO2	9840020OTI	2.5P	125	-	14	-	64	16	12	15	4	4
M22 × 2.5	ISO2	9740022TI	2.5P	140	-	20	-	71	18	14.5	17	4	4
M22 × 1.5	ISO2	9840022OTI	2.5P	125	-	14	-	64	18	14.5	17	4	4
M24 × 3	ISO2	9740024TI	2.5P	160	-	25	-	82	18	14.5	17	4	4
For G Threads													
G 1/8-28	-	9940R02TI	2.5P	90	-	12	-	46	7	5.5	8	3	4
G 1/4-19	-	9940R04TI	2.5P	100	-	14	-	51	11	9	12	3	4
G 3/8-19	-	9940R06TI	2.5P	100	-	14	-	51	12	9	12	3	4
G 1/2-14	-	9940R08TI	2.5P	125	-	18	-	64	16	12	15	4	4

①

Spiral Fluted Taps
(for blind hole)

②

Spiral Fluted Taps
(for through hole)

③

Spiral Pointed Taps
(for through hole)

④

Hand Taps

⑤

Cemented Carbide Taps

⑥

Roll Taps

⑦

Special Thread Taps
Simple Inspection Tools

⑧

Pipe Taps

⑨

Thread Mills
Premium Thread Mills

⑩

Dies

⑪

Center Drills
Centering Tools

⑫

Precision Machinery/
Medical Surgical Instruments

DIN

①-97

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

M E M O

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

AU+SP

Plus Series Spiral Fluted Taps,
Optimum Coating for the Tapping



Specification



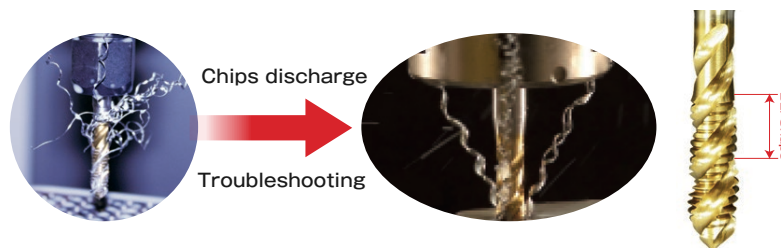
Tapping Speed depending on Materials

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	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 ~ 20 (m/min)	10 ~ 20 (m/min)	10 ~ 20 (m/min)	10 ~ 20 (m/min)	5 ~ 10 (m/min)	20 ~ 30 (m/min)	20 ~ 30 (m/min)

Product Features

BLF (Special shape of threaded part) + Significant improvements in chip discharge performance from a unique flute shape.

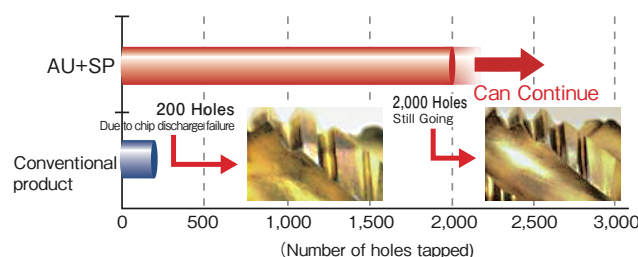
- The AU+SP tap has a special shape that has the first few threads at full size and reduces the remainder to half of the screw thread height.
- The special flute shape offers the following performance effects;
 1. Prevents chipping of the complete threads.
 2. Reduces the tapping torque and frictional resistance.
 3. Creates a smooth discharge of chips.



Tapping Data

Tapping conditions [M6×1]

Workpiece Material	SCM440
Bore Hole Size	φ5.0
Tapping Length	9mm, blind hole
Tapping Speed	10m/min
Machinery Type	Vertical machining center (using floating holder)
Tapping Fluid	Water soluble cutting fluid (chlorine-free 20 to 1 dilution)



Moving the identification markings to the square end of the tap generates a roundness with higher precision, a better surface finish on the taps shank diameter and improves the accuracy of the tap. Minute burrs can occur during marking, even with laser engraving, therefore moving the identification markings to the square improves the overall quality and performance of the tap.



The AU+SP is applicable to a wide range of work materials. It utilizes a flute shape that can maximize the features of the coating (wear resistance, heat resistance, resistance to welding) and can handle a wide range of work materials. It is also ideal for water soluble cutting fluids.

JIS

①-99

Think threads with
YAMAWA

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

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

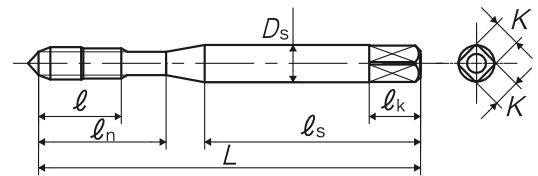
Precision Machinery/
Medical Surgical Instruments

⑫

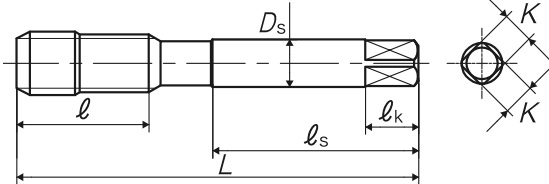
JIS

①-100

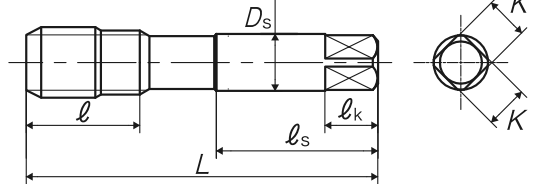
TYPE: 1



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	MSRP
For Metric Threads													
M2 × 0.4	P2	VSAPQ2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	1	¥ 3,820
M2.5 × 0.45	P2	VSAPQ2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	1	¥ 3,290
M2.6 × 0.45	P2	VSAPQ2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	1	¥ 3,290
M3 × 0.5	P2	VSAPQ3.0G	2.5P	46	9	14	26	4	3.2	6	3	1	¥ 2,800
M4 × 0.7	P2	VSAPQ4.0I	2.5P	52	11	17	29	5	4	7	3	1	¥ 2,800
M5 × 0.8	P2	VSAPQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 2,850
M6 × 1	P2	VSAPQ6.0M	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 2,880
M8 × 1.25	P3	VSAPR8.0N	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 4,160
M8 × 1	P3	VSAPR8.0M	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 4,700
M10 × 1.5	P3	VSAPR010O	2.5P	75	23	-	38	7	5.5	8	4	2	¥ 4,870
M10 × 1.25	P3	VSAPR010N	2.5P	75	23	-	38	7	5.5	8	4	2	¥ 4,870
M10 × 1	P3	VSAPR010M	2.5P	75	23	-	38	7	5.5	8	4	2	¥ 5,350
M12 × 1.75	P3	VSAPR012P	2.5P	82	26	-	42	8.5	6.5	9	4	2	¥ 6,440
M12 × 1.5	P3	VSAPR012O	2.5P	82	26	-	42	8.5	6.5	9	4	2	¥ 6,440
M12 × 1.25	P3	VSAPR012N	2.5P	82	26	-	42	8.5	6.5	9	4	2	¥ 6,440
M14 × 2	P3	VSAPR014Q	2.5P	88	26	-	45	10.5	8	11	4	2	¥ 8,870
M14 × 1.5	P3	VSAPR014O	2.5P	88	26	-	45	10.5	8	11	4	2	¥ 8,870
M16 × 2	P3	VSAPR016Q	2.5P	95	26	-	48	12.5	10	13	4	2	¥ 12,000
M16 × 1.5	P3	VSAPR016O	2.5P	95	26	-	48	12.5	10	13	4	2	¥ 12,000
M18 × 2.5	P4	VSAPS018R	2.5P	100	33	-	51	14	11	14	4	2	¥ 15,700
M18 × 1.5	P4	VSAPS018O	2.5P	100	33	-	51	14	11	14	4	2	¥ 15,700
M20 × 2.5	P4	VSAPS020R	2.5P	105	33	-	50	15	12	15	4	3	¥ 19,800
M20 × 1.5	P4	VSAPS020O	2.5P	105	33	-	50	15	12	15	4	3	¥ 19,800

① Spiral Fluted Tap Series for blind hole

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

ANSI

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

AU+SP

Plus Series Spiral Fluted Taps, Coated



Specification

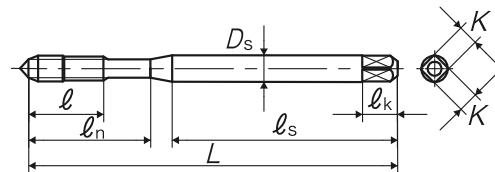


■ For wide range of materials.

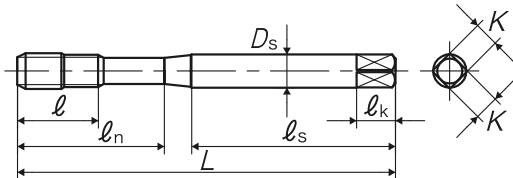
Tapping Speed depending on Materials

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	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 ~ 20 (m/min)	10 ~ 20 (m/min)	10 ~ 20 (m/min)	10 ~ 20 (m/min)	5 ~ 10 (m/min)	20 ~ 30 (m/min)	20 ~ 30 (m/min)

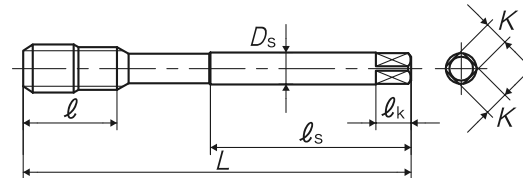
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1C

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	ℓ_s (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	D3	ST3.0G3NEV	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	3	1
M4 × 0.7	D4	ST4.0I4NEV	2.5P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	3	1
M5 × 0.8	D4	ST5.0K4NEV	2.5P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	3	1
M6 × 1	D5	ST6.0M5NEV	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	1
M8 × 1.25	D5	ST8.0N5NEV	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	2
M8 × 1	D5	ST8.0M5NEV	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	2
M10 × 1.5	D6	ST010O6NEV	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	4	2
M10 × 1.25	D5	ST010N5NEV	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	4	2
M10 × 1	D5	ST010M5NEV	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	4	2
M12 × 1.75	D6	ST012P6NEV	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	4	3
M12 × 1.5	D6	ST012O6NEV	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	4	3
M12 × 1.25	D5	ST012N5NEV	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	4	3

ANSI

①-101

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

Spiral Fluted Tap Series for blind hole

DIN

AU+SP

Plus Series Spiral Fluted Taps, Coated

Specification



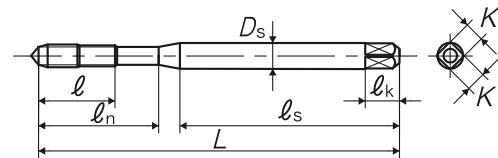
■ Optimum coating suitable for the tapping condition.

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	Stainless steels ステンレス鋼	Aluminum alloy castings アルミ合金鑄物	Zinc alloy castings 亜鉛合金鑄物
10 ~ 20 (m/min)	10 ~ 20 (m/min)	10 ~ 20 (m/min)	10 ~ 20 (m/min)	5 ~ 10 (m/min)	20 ~ 30 (m/min)	20 ~ 30 (m/min)

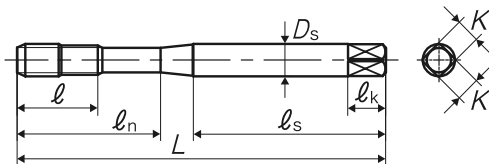
TYPE: 1

DIN371



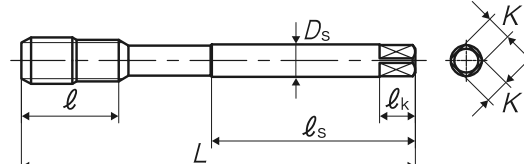
TYPE: 2

DIN371



TYPE: 3

DIN376/DIN374



Segment : 1D

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	ISO2	SE3.0GANEV	2.5P	56	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2	SE4.0IANEV	2.5P	63	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2	SE5.0KANEV	2.5P	70	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2	SE6.0MANEV	2.5P	80	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2	SE8.0NANEV	2.5P	90	19	35	47	8	6.2	9	3	2
M8 × 1	ISO2	SN8.0MANEV	2.5P	90	19	-	46	6	4.9	8	3	3
M10 × 1.5	ISO2	SE10.0OANEV	2.5P	100	23	39	52.5	10	8	11	4	2
M10 × 1.25	ISO2	SN10.0NANEV	2.5P	100	23	-	51	7	5.5	8	4	3
M10 × 1	ISO2	SN10.0MANEV	2.5P	90	19	-	46	7	5.5	8	4	3
M12 × 1.75	ISO2	SH12.0PANEV	2.5P	110	26	-	56	9	7	10	4	3
M12 × 1.5	ISO2	SN12.0OANEV	2.5P	100	21	-	51	9	7	10	4	3
M12 × 1.25	ISO2	SN12.0NANEV	2.5P	100	21	-	51	9	7	10	4	3
M14 × 2	ISO2	SH14.0QANEV	2.5P	110	26	-	56	11	9	12	4	3
M14 × 1.5	ISO2	SN14.0OANEV	2.5P	100	21	-	51	11	9	12	4	3
M16 × 2	ISO2	SH16.0QANEV	2.5P	110	26	-	56	12	9	12	4	3
M16 × 1.5	ISO2	SN16.0OANEV	2.5P	100	21	-	51	12	9	12	4	3
M18 × 2.5	ISO2	SH18.0RANEV	2.5P	125	33	-	64	14	11	14	4	3
M18 × 1.5	ISO2	SN18.0OANEV	2.5P	110	24	-	56	14	11	14	4	3
M20 × 2.5	ISO2	SH20.0RANEV	2.5P	140	33	-	71	16	12	15	4	3
M20 × 1.5	ISO2	SN20.0OANEV	2.5P	125	24	-	64	16	12	15	4	3

· This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

1

DIN

Spiral Fluted Taps
(for blind hole)

1

Spiral Fluted Taps
(for through hole)

2

Spiral Pointed Taps
(for through hole)

3

Hand Taps

4

Cemented
Carbide Taps

5

Roll Taps

6

Special Thread Taps
Simple Inspection Tools

7

Pipe Taps

8

Thread Mills
Premium Thread Mills

9

Dies

10

Center Drills
Centering Tools

11

Precision Machinery/
Medical Surgical Instruments

12

DIN

1-102

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-103

S

LS-SP

Long Shank Spiral Fluted Taps



Specification

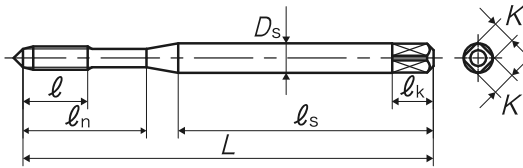


Tapping Speeds depending on Materials

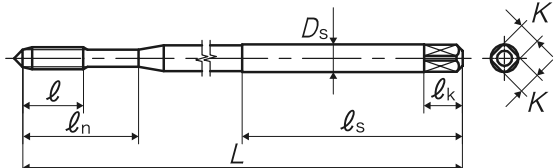
Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼
5~10 (m/min)	5~10 (m/min)

■ Long shank spiral fluted taps for tapping threads in deep holes that cannot be reached with a standard overall length.

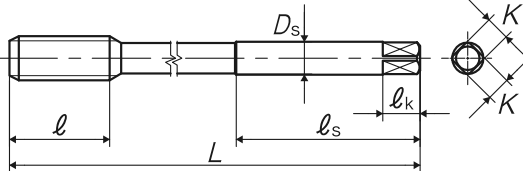
TYPE:1



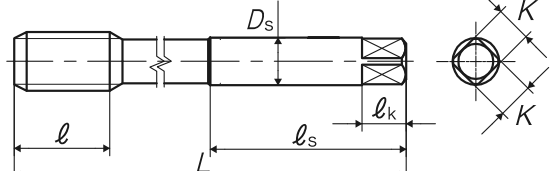
TYPE:2



TYPE:3



TYPE:4



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	MSRP
For Metric Threads													
M2 × 0.4	P1	SPFP2.0EL07	2.5P	70	7.2	15	52	3	2.5	5	2	1	¥ 4,630 ※
M2 × 0.4	P1	SPFP2.0EL10	2.5P	100	7.2	15	30	3	2.5	5	2	2	¥ 7,100 ※
M2.3 × 0.4	P1	SPFP2.3EL07	2.5P	70	7.2	15	52	3	2.5	5	2	1	¥ 4,170 ※
M2.3 × 0.4	P1	SPFP2.3EL10	2.5P	100	7.2	15	30	3	2.5	5	2	2	¥ 6,380 ※
M2.5 × 0.45	P1	SPFP2.5FL07	2.5P	70	8.1	15	52	3	2.5	5	2	1	¥ 3,650 ※
M2.5 × 0.45	P1	SPFP2.5FL10	2.5P	100	8.1	15	30	3	2.5	5	2	2	¥ 5,980 ※
M2.6 × 0.45	P1	SPFP2.6FL07	2.5P	70	8.1	15	52	3	2.5	5	2	1	¥ 3,650 ※
M2.6 × 0.45	P1	SPFP2.6FL10	2.5P	100	8.1	15	30	3	2.5	5	2	2	¥ 5,980 ※
M3 × 0.5	P1	SPFP3.0GL07	2.5P	70	9	18	46	4	3.2	6	3	1	¥ 2,840 ※
M3 × 0.5	P1	SPFP3.0GL10	2.5P	100	9	18	40	4	3.2	6	3	2	¥ 4,120 ※
M3 × 0.5	P1	SPFP3.0GL12	2.5P	120	9	18	40	4	3.2	6	3	2	¥ 4,940 ※
M3 × 0.5	P1	SPFP3.0GL15	2.5P	150	9	18	40	4	3.2	6	3	2	¥ 7,770 ※
M3 × 0.5	P2	SPFQ3.0GL10	2.5P	100	9	18	40	4	3.2	6	3	2	¥ 4,120 ※
M3 × 0.5	P2	SPFQ3.0GL15	2.5P	150	9	18	40	4	3.2	6	3	2	¥ 7,770 ※
M3 × 0.5	P3	SPFR3.0GL10	2.5P	100	9	18	40	4	3.2	6	3	2	¥ 4,120 ※
M3 × 0.5	P3	SPFR3.0GL15	2.5P	150	9	18	40	4	3.2	6	3	2	¥ 7,770 ※
M4 × 0.7	P2	SPFQ4.0IL07	2.5P	70	11	21	43	5	4	7	3	1	¥ 2,480 ※

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

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

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M4 × 0.7	P2	SPFQ4.0IL10	2.5P	100	11	21	40	5	4	7	3	2	¥ 3,540
M4 × 0.7	P2	SPFQ4.0IL12	2.5P	120	11	21	40	5	4	7	3	2	¥ 4,660 ※
M4 × 0.7	P2	SPFQ4.0IL15	2.5P	150	11	21	40	5	4	7	3	2	¥ 7,180
M4 × 0.7	P3	SPFR4.0IL10	2.5P	100	11	21	40	5	4	7	3	2	¥ 3,770 ※
M4 × 0.7	P3	SPFR4.0IL15	2.5P	150	11	21	40	5	4	7	3	2	¥ 7,180 ※
M5 × 0.8	P2	SPFQ5.0KL07	2.5P	70	14	25	40	5.5	4.5	7	3	1	¥ 2,260 ※
M5 × 0.8	P2	SPFQ5.0KL10	2.5P	100	13	25	40	5.5	4.5	7	3	2	¥ 3,100
M5 × 0.8	P2	SPFQ5.0KL12	2.5P	120	13	25	40	5.5	4.5	7	3	2	¥ 4,110 ※
M5 × 0.8	P2	SPFQ5.0KL15	2.5P	150	13	25	40	5.5	4.5	7	3	2	¥ 5,580
M5 × 0.8	P3	SPFR5.0KL10	2.5P	100	13	25	40	5.5	4.5	7	3	2	¥ 3,300 ※
M5 × 0.8	P3	SPFR5.0KL15	2.5P	150	13	25	40	5.5	4.5	7	3	2	¥ 5,580 ※
M6 × 1	P2	SPFQ6.0ML10	2.5P	100	15	30	40	6	4.5	7	3	2	¥ 2,660
M6 × 1	P2	SPFQ6.0ML12	2.5P	120	15	30	40	6	4.5	7	3	2	¥ 3,630 ※
M6 × 1	P2	SPFQ6.0ML15	2.5P	150	15	30	40	6	4.5	7	3	2	¥ 4,980
M6 × 1	P2	SPFQ6.0ML20	2.5P	200	15	30	40	6	4.5	7	3	2	¥ 6,880 ※
M6 × 1	P3	SPFR6.0ML10	2.5P	100	15	30	40	6	4.5	7	3	2	¥ 2,820 ※
M6 × 1	P3	SPFR6.0ML15	2.5P	150	15	30	40	6	4.5	7	3	2	¥ 4,980 ※
M6 × 0.75	P2	SPFQ6.0JL10	2.5P	100	15	30	40	6	4.5	7	3	2	¥ 4,040 ※
M8 × 1.25	P2	SPQ8.0NL10	2.5P	100	19	-	50	6.2	5	8	3	3	¥ 3,430
M8 × 1.25	P2	SPQ8.0NL12	2.5P	120	19	-	50	6.2	5	8	3	3	¥ 4,520 ※
M8 × 1.25	P2	SPQ8.0NL15	2.5P	150	19	-	50	6.2	5	8	3	3	¥ 6,210
M8 × 1.25	P2	SPQ8.0NL20	2.5P	200	19	-	50	6.2	5	8	3	3	¥ 9,190 ※
M8 × 1.25	P3	SPR8.0NL10	2.5P	100	19	-	50	6.2	5	8	3	3	¥ 3,650 ※
M8 × 1.25	P3	SPR8.0NL15	2.5P	150	19	-	50	6.2	5	8	3	3	¥ 6,210 ※
M8 × 1	P2	SPQ8.0ML10	2.5P	100	19	-	50	6.2	5	8	3	3	¥ 3,930 ※
M8 × 1	P2	SPQ8.0ML12	2.5P	120	19	-	50	6.2	5	8	3	3	¥ 5,090 ※
M8 × 1	P2	SPQ8.0ML15	2.5P	150	19	-	50	6.2	5	8	3	3	¥ 6,490 ※
M8 × 0.75	P2	SPQ8.0JL10	2.5P	100	19	-	50	6.2	5	8	3	3	¥ 3,930 ※
M10 × 1.5	P2	SPQ010OL10	2.5P	100	23	-	50	7	5.5	8	3	3	¥ 4,420
M10 × 1.5	P2	SPQ010OL12	2.5P	120	23	-	50	7	5.5	8	3	3	¥ 5,250 ※
M10 × 1.5	P2	SPQ010OL15	2.5P	150	23	-	50	7	5.5	8	3	3	¥ 7,220
M10 × 1.5	P2	SPQ010OL20	2.5P	200	23	-	50	7	5.5	8	3	3	¥ 10,100 ※
M10 × 1.5	P3	SPR010OL10	2.5P	100	23	-	50	7	5.5	8	3	3	¥ 4,420 ※
M10 × 1.5	P3	SPR010OL15	2.5P	150	23	-	50	7	5.5	8	3	3	¥ 7,220 ※
M10 × 1.25	P2	SPQ010NL10	2.5P	100	23	-	50	7	5.5	8	3	3	¥ 4,420
M10 × 1.25	P2	SPQ010NL12	2.5P	120	23	-	50	7	5.5	8	3	3	¥ 5,250 ※
M10 × 1.25	P2	SPQ010NL15	2.5P	150	23	-	50	7	5.5	8	3	3	¥ 7,220
M10 × 1.25	P2	SPQ010NL20	2.5P	200	23	-	50	7	5.5	8	3	3	¥ 10,100 ※
M10 × 1.25	P3	SPR010NL10	2.5P	100	23	-	50	7	5.5	8	3	3	¥ 4,420 ※
M10 × 1	P2	SPQ010ML10	2.5P	100	23	-	50	7	5.5	8	3	3	¥ 4,780 ※
M10 × 1	P2	SPQ010ML12	2.5P	120	23	-	50	7	5.5	8	3	3	¥ 5,490 ※
M10 × 1	P2	SPQ010ML15	2.5P	150	23	-	50	7	5.5	8	3	3	¥ 8,150 ※
M10 × 0.75	P2	SPQ010JL15	2.5P	150	13	-	50	7	5.5	8	3	3	¥ 10,200 ※
M12 × 1.75	P2	SPQ012PL10	2.5P	100	26	-	50	8.5	6.5	9	3	3	¥ 5,420 ※
M12 × 1.75	P2	SPQ012PL12	2.5P	120	26	-	50	8.5	6.5	9	3	3	¥ 6,290 ※
M12 × 1.75	P2	SPQ012PL15	2.5P	150	26	-	50	8.5	6.5	9	3	3	¥ 9,040
M12 × 1.75	P2	SPQ012PL20	2.5P	200	26	-	50	8.5	6.5	9	3	3	¥ 12,700
M12 × 1.75	P3	SPR012PL15	2.5P	150	26	-	50	8.5	6.5	9	3	3	¥ 9,040 ※
M12 × 1.5	P2	SPQ012OL10	2.5P	100	26	-	50	8.5	6.5	9	3	3	¥ 5,420 ※
M12 × 1.5	P2	SPQ012OL12	2.5P	120	26	-	50	8.5	6.5	9	3	3	¥ 6,290 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-104

① Spiral Fluted Tap Series for blind hole

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

JIS

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	MSRP
M12 × 1.5	P2	SPQ012OL15	2.5P	150	26	-	50	8.5	6.5	9	3	3	¥ 9,040 ※
M12 × 1.5	P2	SPQ012OL20	2.5P	200	26	-	50	8.5	6.5	9	3	3	¥ 12,700 ※
M12 × 1.5	P3	SPR012OL15	2.5P	150	26	-	50	8.5	6.5	9	3	3	¥ 9,040 ※
M12 × 1.25	P2	SPQ012NL10	2.5P	100	26	-	50	8.5	6.5	9	3	3	¥ 5,420 ※
M12 × 1.25	P2	SPQ012NL12	2.5P	120	26	-	50	8.5	6.5	9	3	3	¥ 6,290 ※
M12 × 1.25	P2	SPQ012NL15	2.5P	150	26	-	50	8.5	6.5	9	3	3	¥ 9,040
M12 × 1.25	P2	SPQ012NL20	2.5P	200	26	-	50	8.5	6.5	9	3	3	¥ 12,700 ※
M12 × 1.25	P3	SPR012NL15	2.5P	150	26	-	50	8.5	6.5	9	3	3	¥ 9,040 ※
M12 × 1	P2	SPQ012ML10	2.5P	100	26	-	50	8.5	6.5	9	3	3	¥ 6,590 ※
M12 × 1	P2	SPQ012ML12	2.5P	120	26	-	50	8.5	6.5	9	3	3	¥ 7,430 ※
M12 × 1	P2	SPQ012ML15	2.5P	150	26	-	50	8.5	6.5	9	3	3	¥ 11,200 ※
M14 × 2	P2	SPQ014QL12	2.5P	120	26	-	60	10.5	8	11	3	3	¥ 8,290 ※
M14 × 2	P2	SPQ014QL15	2.5P	150	26	-	60	10.5	8	11	3	3	¥ 11,400
M14 × 2	P2	SPQ014QL20	2.5P	200	26	-	60	10.5	8	11	3	3	¥ 15,200
M14 × 2	P3	SPR014QL15	2.5P	150	26	-	60	10.5	8	11	3	3	¥ 11,400 ※
M14 × 1.5	P2	SPQ014OL12	2.5P	120	26	-	60	10.5	8	11	3	3	¥ 8,290 ※
M14 × 1.5	P2	SPQ014OL15	2.5P	150	26	-	60	10.5	8	11	3	3	¥ 11,400
M14 × 1.5	P2	SPQ014OL20	2.5P	200	26	-	60	10.5	8	11	3	3	¥ 15,200 ※
M14 × 1.5	P3	SPR014OL15	2.5P	150	26	-	60	10.5	8	11	3	3	¥ 11,400 ※
M16 × 2	P2	SPQ016QL15	2.5P	150	26	-	60	12.5	10	13	3	3	¥ 12,300
M16 × 2	P2	SPQ016QL20	2.5P	200	26	-	60	12.5	10	13	3	3	¥ 16,300
M16 × 2	P2	SPQ016QL25	2.5P	250	26	-	60	12.5	10	13	3	3	¥ 20,200 ※
M16 × 2	P3	SPR016QL15	2.5P	150	26	-	60	12.5	10	13	3	3	¥ 12,300 ※
M16 × 1.5	P2	SPQ016OL15	2.5P	150	26	-	60	12.5	10	13	3	3	¥ 12,300
M16 × 1.5	P2	SPQ016OL20	2.5P	200	26	-	60	12.5	10	13	3	3	¥ 16,300 ※
M16 × 1.5	P3	SPR016OL15	2.5P	150	26	-	60	12.5	10	13	3	3	¥ 12,300 ※
M18 × 2.5	P3	SPR018RL15	2.5P	150	33	-	70	14	11	14	4	3	¥ 16,900
M18 × 2.5	P3	SPR018RL20	2.5P	200	33	-	70	14	11	14	4	3	¥ 21,200 ※
M18 × 2.5	P3	SPR018RL25	2.5P	250	33	-	70	14	11	14	4	3	¥ 25,900 ※
M18 × 2.5	P4	SPS018RL15	2.5P	150	33	-	70	14	11	14	4	3	¥ 16,900 ※
M18 × 2	P3	SPR018QL20	2.5P	200	33	-	70	14	11	14	4	3	¥ 21,200 ※
M18 × 1.5	P2	SPQ018OL15	2.5P	150	33	-	70	14	11	14	4	3	¥ 16,900
M18 × 1.5	P2	SPQ018OL20	2.5P	200	33	-	70	14	11	14	4	3	¥ 21,200 ※
M20 × 2.5	P3	SPR020RL15	2.5P	150	33	-	70	15	12	15	4	4	¥ 21,600
M20 × 2.5	P3	SPR020RL20	2.5P	200	33	-	70	15	12	15	4	4	¥ 27,000
M20 × 2.5	P3	SPR020RL25	2.5P	250	33	-	70	15	12	15	4	4	¥ 34,300 ※
M20 × 2.5	P4	SPS020RL15	2.5P	150	33	-	70	15	12	15	4	4	¥ 21,600 ※
M20 × 2	P3	SPR020QL20	2.5P	200	33	-	70	15	12	15	4	4	¥ 27,000 ※
M20 × 1.5	P3	SPR020OL15	2.5P	150	33	-	70	15	12	15	4	4	¥ 21,600
M20 × 1.5	P3	SPR020OL20	2.5P	200	33	-	70	15	12	15	4	4	¥ 27,000 ※
M22 × 2.5	P3	SPR022RL15	2.5P	150	33	-	70	17	13	16	4	4	¥ 24,100 ※
M22 × 2.5	P3	SPR022RL20	2.5P	200	33	-	70	17	13	16	4	4	¥ 29,900 ※
M22 × 2.5	P3	SPR022RL25	2.5P	250	33	-	70	17	13	16	4	4	¥ 36,800 ※
M22 × 2.5	P4	SPS022RL15	2.5P	150	33	-	70	17	13	16	4	4	¥ 24,100 ※
M22 × 2	P3	SPR022QL20	2.5P	200	33	-	70	17	13	16	4	4	¥ 29,900 ※
M22 × 1.5	P3	SPR022OL15	2.5P	150	33	-	70	17	13	16	4	4	¥ 24,100
M22 × 1.5	P3	SPR022OL20	2.5P	200	33	-	70	17	13	16	4	4	¥ 29,900 ※
M24 × 3	P3	SPR024SL15	2.5P	150	39	-	80	19	15	18	4	4	¥ 28,000
M24 × 3	P3	SPR024SL20	2.5P	200	39	-	80	19	15	18	4	4	¥ 33,600
M24 × 3	P3	SPR024SL25	2.5P	250	39	-	80	19	15	18	4	4	¥ 42,500 ※

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

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

LS-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	MSRP
M24 × 3	P4	SPS024SL15	2.5P	150	39	-	80	19	15	18	4	4	¥ 28,000 ※
M24 × 2	P3	SPR024QL20	2.5P	200	39	-	80	19	15	18	4	4	¥ 33,600 ※
M24 × 1.5	P3	SPR024OL15	2.5P	150	39	-	80	19	15	18	4	4	¥ 28,000
M24 × 1.5	P3	SPR024OL20	2.5P	200	39	-	80	19	15	18	4	4	¥ 33,600 ※
M27 × 3	P3	SPR027SL20	2.5P	200	39	-	80	20	15	18	4	4	¥ 37,600 ※
M27 × 3	P3	SPR027SL25	2.5P	250	39	-	80	20	15	18	4	4	¥ 48,700 ※
M27 × 2	P3	SPR027QL20	2.5P	200	39	-	80	20	15	18	4	4	¥ 37,600 ※
M27 × 2	P3	SPR027QL25	2.5P	250	39	-	80	20	15	18	4	4	¥ 48,700 ※
M27 × 1.5	P3	SPR027OL20	2.5P	200	39	-	80	20	15	18	4	4	¥ 37,600 ※
M27 × 1.5	P3	SPR027OL25	2.5P	250	39	-	80	20	15	18	4	4	¥ 48,700 ※
M30 × 3.5	P4	SPS030TL20	2.5P	200	46	-	80	23	17	20	4	4	¥ 48,300 ※
M30 × 3.5	P4	SPS030TL25	2.5P	250	46	-	80	23	17	20	4	4	¥ 61,200 ※
M30 × 3.5	P4	SPS030TL30	2.5P	300	46	-	80	23	17	20	4	4	¥ 70,400 ※
M30 × 3	P3	SPR030SL20	2.5P	200	46	-	80	23	17	20	4	4	¥ 48,300 ※
M30 × 3	P3	SPR030SL25	2.5P	250	46	-	80	23	17	20	4	4	¥ 61,200 ※
M30 × 2	P3	SPR030QL20	2.5P	200	46	-	80	23	17	20	4	4	¥ 48,300 ※
M30 × 2	P3	SPR030QL25	2.5P	250	46	-	80	23	17	20	4	4	¥ 61,200 ※
M30 × 1.5	P3	SPR030OL20	2.5P	200	46	-	80	23	17	20	4	4	¥ 48,300 ※
M30 × 1.5	P3	SPR030OL25	2.5P	250	46	-	80	23	17	20	4	4	¥ 61,200 ※
M30 × 1.5	P3	SPR030OL30	2.5P	300	46	-	80	23	17	20	4	4	¥ 70,400 ※
M33 × 3.5	P4	SPS033TL25	2.5P	250	51	-	80	25	19	22	4	4	¥ 70,200 ※
M33 × 3.5	P4	SPS033TL30	2.5P	300	51	-	80	25	19	22	4	4	¥ 80,900 ※
M36 × 4	P4	SPS036UL25	2.5P	250	57	-	100	28	21	24	4	4	¥ 72,900 ※
M36 × 4	P4	SPS036UL30	2.5P	300	57	-	100	28	21	24	4	4	¥ 84,500 ※
For Unified Threads													
1/4-20UNC	P2	SPFQU04NL10	2.5P	100	15	30	40	6	4.5	7	3	2	¥ 3,060 ※
1/4-20UNC	P2	SPFQU04NL15	2.5P	150	15	30	40	6	4.5	7	3	2	¥ 4,940 ※
1/4-28UNF	P2	SPFQU04KL10	2.5P	100	15	30	40	6	4.5	7	3	2	¥ 3,060 ※
1/4-28UNF	P2	SPFQU04KL15	2.5P	150	15	30	40	6	4.5	7	3	2	¥ 4,940 ※
5/16-18UNC	P2	SPQU05OL10	2.5P	100	19	-	50	6.2	5	8	3	3	¥ 3,710 ※
5/16-18UNC	P2	SPQU05OL15	2.5P	150	19	-	50	6.2	5	8	3	3	¥ 6,190 ※
5/16-24UNF	P2	SPQU05ML10	2.5P	100	19	-	50	6.2	5	8	3	3	¥ 3,710 ※
5/16-24UNF	P2	SPQU05ML15	2.5P	150	19	-	50	6.2	5	8	3	3	¥ 6,190 ※
3/8-16UNC	P2	SPQU06PL10	2.5P	100	23	-	50	7	5.5	8	3	3	¥ 4,520 ※
3/8-16UNC	P2	SPQU06PL15	2.5P	150	23	-	50	7	5.5	8	3	3	¥ 7,340 ※
3/8-16UNC	P2	SPQU06PL20	2.5P	200	23	-	50	7	5.5	8	3	3	¥ 10,700 ※
3/8-24UNF	P2	SPQU06ML10	2.5P	100	23	-	50	7	5.5	8	3	3	¥ 4,520 ※
3/8-24UNF	P2	SPQU06ML15	2.5P	150	23	-	50	7	5.5	8	3	3	¥ 7,340 ※
3/8-24UNF	P2	SPQU06ML20	2.5P	200	23	-	50	7	5.5	8	3	3	¥ 10,700 ※
7/16-14UNC	P3	SPRU07QL15	2.5P	150	26	-	50	8.5	6.5	9	3	3	¥ 8,680 ※
7/16-20UNF	P2	SPQU07NL15	2.5P	150	26	-	50	8.5	6.5	9	3	3	¥ 8,680 ※
1/2-13UNC	P3	SPRU08RL15	2.5P	150	26	-	60	10.5	8	11	3	3	¥ 9,190 ※
1/2-13UNC	P3	SPRU08RL20	2.5P	200	26	-	60	10.5	8	11	3	3	¥ 13,200 ※
1/2-20UNF	P2	SPQU08NL15	2.5P	150	26	-	60	10.5	8	11	3	3	¥ 9,190 ※
1/2-20UNF	P2	SPQU08NL20	2.5P	200	26	-	60	10.5	8	11	3	3	¥ 13,200 ※
5/8-11UNC	P3	SPRU10UL15	2.5P	150	26	-	60	12.5	10	13	3	3	¥ 12,700 ※
5/8-11UNC	P3	SPRU10UL20	2.5P	200	26	-	60	12.5	10	13	3	3	¥ 16,500 ※
5/8-18UNF	P2	SPQU10OL15	2.5P	150	26	-	60	12.5	10	13	3	3	¥ 12,700 ※
5/8-18UNF	P2	SPQU10OL20	2.5P	200	26	-	60	12.5	10	13	3	3	¥ 16,500 ※
3/4-10UNC	P3	SPRU12VL15	2.5P	150	33	-	70	15	12	15	4	4	¥ 22,000 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-106

① Spiral Fluted Tap Series for blind hole

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

JIS

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	MSRP
3/4-10UNC	P3	SPRU12VL20	2.5P	200	33	-	70	15	12	15	4	4	¥ 28,000 ※
3/4-16UNF	P3	SPRU12PL15	2.5P	150	33	-	70	15	12	15	4	4	¥ 22,000 ※
3/4-16UNF	P3	SPRU12PL20	2.5P	200	33	-	70	15	12	15	4	4	¥ 28,000 ※
7/8-9UNC	P3	SPRU14WL15	2.5P	150	33	-	70	17	13	16	4	4	¥ 24,500 ※
7/8-9UNC	P3	SPRU14WL20	2.5P	200	33	-	70	17	13	16	4	4	¥ 29,900 ※
7/8-14UNF	P3	SPRU14QL20	2.5P	200	33	-	70	17	13	16	4	4	¥ 29,900 ※
1 -8UNC	P3	SPRU16XL15	2.5P	150	39	-	80	19	15	18	4	4	¥ 28,700 ※
1 -8UNC	P3	SPRU16XL20	2.5P	200	39	-	80	19	15	18	4	4	¥ 35,700 ※
1 -12UNF	P3	SPRU16SL20	2.5P	200	39	-	80	19	15	18	4	4	¥ 35,700 ※
For Whitworth Threads													
1/4W20	P2	SPFQW04NL10	2.5P	100	15	30	40	6	4.5	7	3	2	¥ 3,060 ※
1/4W20	P2	SPFQW04NL15	2.5P	150	15	30	40	6	4.5	7	3	2	¥ 4,940 ※
5/16W18	P2	SPQW05OL10	2.5P	100	19	-	50	6.2	5	8	3	3	¥ 3,710 ※
5/16W18	P2	SPQW05OL15	2.5P	150	19	-	50	6.2	5	8	3	3	¥ 6,190 ※
3/8W16	P2	SPQW06PL10	2.5P	100	23	-	50	7	5.5	8	3	3	¥ 4,520 ※
3/8W16	P2	SPQW06PL15	2.5P	150	23	-	50	7	5.5	8	3	3	¥ 7,340 ※
3/8W16	P2	SPQW06PL20	2.5P	200	23	-	50	7	5.5	8	3	3	¥ 10,700 ※
7/16W14	P3	SPRW07QL15	2.5P	150	26	-	50	8.5	6.5	9	3	3	¥ 8,680 ※
1/2W12	P3	SPRW08SL15	2.5P	150	26	-	60	10.5	8	11	3	3	¥ 9,190 ※
1/2W12	P3	SPRW08SL20	2.5P	200	26	-	60	10.5	8	11	3	3	¥ 13,200 ※
5/8W11	P3	SPRW10UL15	2.5P	150	26	-	60	12.5	10	13	3	3	¥ 12,700 ※
5/8W11	P3	SPRW10UL20	2.5P	200	26	-	60	12.5	10	13	3	3	¥ 16,500 ※
3/4W10	P3	SPRW12VL15	2.5P	150	33	-	70	15	12	15	4	4	¥ 22,000 ※
3/4W10	P3	SPRW12VL20	2.5P	200	33	-	70	15	12	15	4	4	¥ 28,000 ※
7/8W9	P3	SPRW14WL15	2.5P	150	33	-	70	17	13	16	4	4	¥ 24,500 ※
7/8W9	P3	SPRW14WL20	2.5P	200	33	-	70	17	13	16	4	4	¥ 29,900 ※
1 W8	P3	SPRW16XL15	2.5P	150	39	-	80	19	15	18	4	4	¥ 28,700 ※
1 W8	P3	SPRW16XL20	2.5P	200	39	-	80	19	15	18	4	4	¥ 35,700 ※

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

Spiral Fluted Tap Series for blind hole

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

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-108

LS-SP OX

Long Shank Oxidized Spiral Tap



Specification

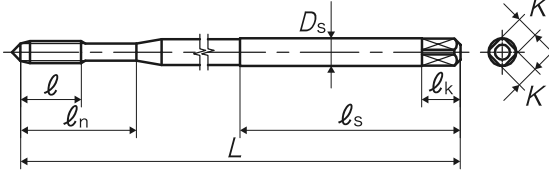


■ Long shank spiral fluted taps for tapping threads in deep holes that cannot be reached with a standard overall length. The thread surface is oxidized to prevent welding.

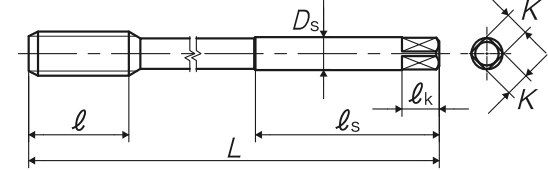
Tapping Speeds depending on Materials

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

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	MSRP
For Metric Threads													
M5 × 0.8	P2	SPFQ5.0KL12X	2.5P	120	13	25	40	5.5	4.5	7	3	1	¥ 4,760 *
M8 × 1.25	P2	SPQ8.0NL10X	2.5P	100	19	-	50	6.2	5	8	3	2	¥ 4,160 *
M8 × 1.25	P2	SPQ8.0NL12X	2.5P	120	19	-	50	6.2	5	8	3	2	¥ 5,140 *
M10 × 1.5	P2	SPQ010OL12X	2.5P	120	23	-	50	7	5.5	8	3	2	¥ 5,980 *
M10 × 1.5	P2	SPQ010OL15X	2.5P	150	23	-	50	7	5.5	8	3	2	¥ 8,220 *
M10 × 1.25	P2	SPQ010NL10X	2.5P	100	23	-	50	7	5.5	8	3	2	¥ 5,040 *
M10 × 1.25	P2	SPQ010NL12X	2.5P	120	23	-	50	7	5.5	8	3	2	¥ 5,980 *
M12 × 1.75	P2	SPQ012PL10X	2.5P	100	26	-	50	8.5	6.5	9	3	2	¥ 6,170 *
M12 × 1.75	P2	SPQ012PL15X	2.5P	150	26	-	50	8.5	6.5	9	3	2	¥ 10,300 *
M12 × 1.25	P2	SPQ012NL12X	2.5P	120	26	-	50	8.5	6.5	9	3	2	¥ 7,170 *
M16 × 2	P2	SPQ016QL15X	2.5P	150	26	-	60	12.5	10	13	3	2	¥ 14,100 *

* = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-109

S

LS-SP LH

Long Shank Spiral Fluted Taps for Left Hand Threads



Specification



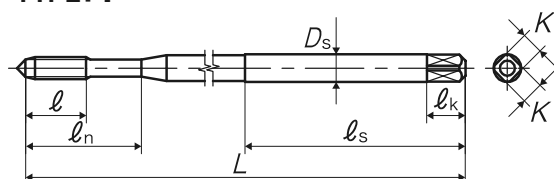
■ Long shank spiral fluted taps for tapping left hand threads in deep holes that cannot be reached with a standard overall length.

Tapping Speeds depending on Materials

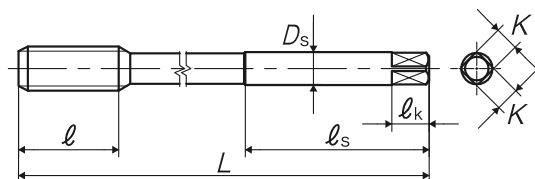
Medium carbon steels
中炭素鋼
5~10
(m/min)

High carbon steels
高炭素鋼
5~10
(m/min)

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	MSRP
For Metric Threads													
M3 × 0.5	P1	SPFP3.0GL10L	2.5P	100	9	18	40	4	3.2	6	3	1	¥ 5,640 ※
M4 × 0.7	P2	SPFQ4.0IL10L	2.5P	100	11	21	40	5	4	7	3	1	¥ 5,150 ※
M5 × 0.8	P2	SPFQ5.0KL10L	2.5P	100	13	25	40	5.5	4.5	7	3	1	¥ 4,520 ※
M6 × 1	P2	SPFQ6.0ML10L	2.5P	100	15	30	40	6	4.5	7	3	1	¥ 3,870 ※
M6 × 1	P2	SPFQ6.0ML15L	2.5P	150	15	30	40	6	4.5	7	3	1	¥ 6,810 ※
M8 × 1.25	P2	SPQ8.0NL10-L	2.5P	100	19	-	50	6.2	5	8	3	2	¥ 4,910 ※
M8 × 1.25	P2	SPQ8.0NL15-L	2.5P	150	19	-	50	6.2	5	8	3	2	¥ 8,360 ※
M10 × 1.5	P2	SPQ010OL10-L	2.5P	100	23	-	50	7	5.5	8	3	2	¥ 5,960 ※
M10 × 1.5	P2	SPQ010OL15-L	2.5P	150	23	-	50	7	5.5	8	3	2	¥ 9,710 ※
M10 × 1.25	P2	SPQ010NL15-L	2.5P	150	23	-	50	7	5.5	8	3	2	¥ 9,710 ※
M12 × 1.75	P2	SPQ012PL15-L	2.5P	150	26	-	50	8.5	6.5	9	3	2	¥ 12,300 ※
M12 × 1.5	P2	SPQ012OL15-L	2.5P	150	26	-	50	8.5	6.5	9	3	2	¥ 12,300 ※
M12 × 1.25	P2	SPQ012NL15-L	2.5P	150	26	-	50	8.5	6.5	9	3	2	¥ 12,300 ※
M14 × 2	P2	SPQ014QL15-L	2.5P	150	26	-	60	10.5	8	11	3	2	¥ 15,300 ※
M14 × 1.5	P2	SPQ014OL15-L	2.5P	150	26	-	60	10.5	8	11	3	2	¥ 15,300 ※
M16 × 2	P2	SPQ016QL15-L	2.5P	150	26	-	60	12.5	10	13	3	2	¥ 16,600 ※
M16 × 1.5	P2	SPQ016OL15-L	2.5P	150	26	-	60	12.5	10	13	3	2	¥ 16,600 ※

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

Spiral Fluted Tap Series for blind hole

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

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-110

LS-SP V

Long Shank Spiral Fluted Taps, Coated



Specification

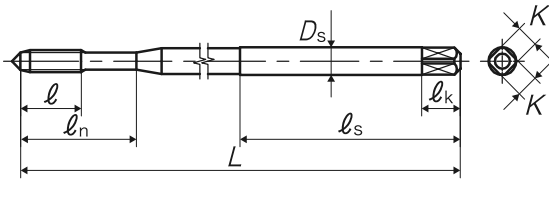


■ Long shank coated spiral fluted taps for tapping threads in deep holes that cannot be reached with a standard overall length.

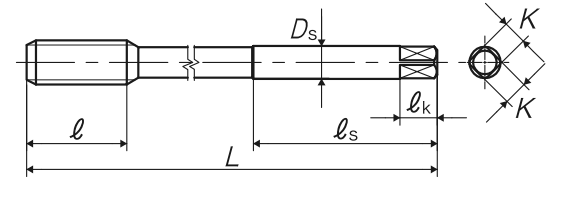
Tapping Speeds depending on Materials

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)

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	MSRP
For Metric Threads													
M3 × 0.5	P1	VSPFP3.0GL10	2.5P	100	9	18	40	4	3.2	6	3	1	¥ 6,720
M4 × 0.7	P2	VSPFQ4.0IL10	2.5P	100	11	21	40	5	4	7	3	1	¥ 6,300
M5 × 0.8	P2	VSPFQ5.0KL10	2.5P	100	13	25	40	5.5	4.5	7	3	1	¥ 5,900
M6 × 1	P2	VSPFQ6.0ML10	2.5P	100	15	30	40	6	4.5	7	3	1	¥ 5,360
M6 × 1	P2	VSPFQ6.0ML15	2.5P	150	15	30	40	6	4.5	7	3	1	¥ 7,470 ※
M8 × 1.25	P2	VSPQ8.0NL10	2.5P	100	19	-	50	6.2	5	8	3	2	¥ 6,570
M8 × 1.25	P2	VSPQ8.0NL15	2.5P	150	19	-	50	6.2	5	8	3	2	¥ 9,080
M10 × 1.5	P2	VSPQ10.0L15	2.5P	150	23	-	50	7	5.5	8	3	2	¥ 10,600
M10 × 1.25	P2	VSPQ10.0NL15	2.5P	150	23	-	50	7	5.5	8	3	2	¥ 10,600 ※
M12 × 1.75	P2	VSPQ12.0PL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	¥ 13,400
M12 × 1.5	P2	VSPQ12.0L15	2.5P	150	26	-	50	8.5	6.5	9	3	2	¥ 13,400 ※
M12 × 1.25	P2	VSPQ12.0NL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	¥ 13,400 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-111

LS-SP-K

Long Shank Spiral Fluted Taps with Long Neck



Specification

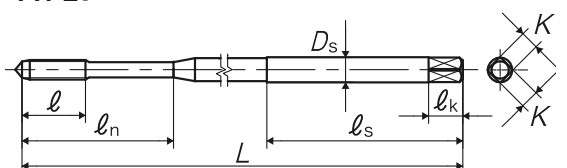


■ Long shank spiral fluted taps with long neck for tapping threads in deep holes that cannot be reached with a standard overall length. The long neck enables deep hole tapping.

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)

TYPE: 1



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	MSRP
For Metric Threads													
M3 × 0.5	P1	SY3.0GPFEBE	2.5P	100	9	28	40	4	3.2	6	2	1	¥ 4,120 ※
M3 × 0.5	P1	SY3.0GPFEBF	2.5P	120	9	28	40	4	3.2	6	2	1	¥ 4,940 ※
M3 × 0.5	P1	SY3.0GPFEBG	2.5P	150	9	28	40	4	3.2	6	2	1	¥ 7,770 ※
M4 × 0.7	P2	SY4.0IQFEBE	2.5P	100	11	31	40	5	4	7	3	1	¥ 3,770 ※
M4 × 0.7	P2	SY4.0IQFEBF	2.5P	120	11	31	40	5	4	7	3	1	¥ 4,660 ※
M4 × 0.7	P2	SY4.0IQFEBG	2.5P	150	11	31	40	5	4	7	3	1	¥ 7,180 ※
M5 × 0.8	P2	SY5.0KQFEBE	2.5P	100	13	38	40	5.5	4.5	7	3	1	¥ 3,300 ※
M5 × 0.8	P2	SY5.0KQFEBF	2.5P	120	13	38	40	5.5	4.5	7	3	1	¥ 4,110 ※
M5 × 0.8	P2	SY5.0KQFEBG	2.5P	150	13	38	40	5.5	4.5	7	3	1	¥ 5,580 ※
M6 × 1	P2	SY6.0MQFEBE	2.5P	100	15	45	40	6	4.5	7	3	1	¥ 2,820 ※
M6 × 1	P2	SY6.0MQFEBF	2.5P	120	15	45	40	6	4.5	7	3	1	¥ 3,630 ※
M6 × 1	P2	SY6.0MQFEBG	2.5P	150	15	45	40	6	4.5	7	3	1	¥ 4,980 ※

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

M E M O

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented
Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-113



SU+SP SU-SP

Spiral Fluted Taps for Stainless Steels

Specification



• Product Name and Size.

SU+SP	M2 ~ M6 (coarse thread)
SU-SP	~ M1.7, M2 ~ M6 (fine thread), M8 ~ , all U, all W

Tapping Speeds depending on Materials

Medium carbon steels 中炭素鋼 ~10 (m/min)	High carbon steels 高炭素鋼 ~10 (m/min)	Alloy steels 合金鋼 ~10 (m/min)	Stainless steels ステンレス鋼 ~10 (m/min)
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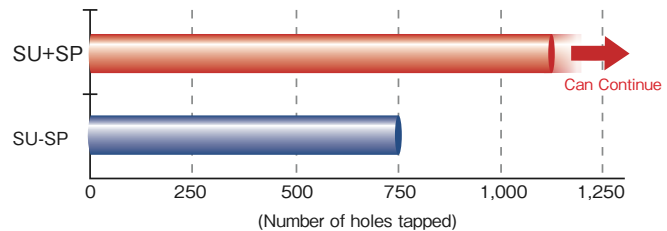
Product Features

- Ideal for blind hole machining in stainless steel, chromium steel, molybdenum steel. These materials have remarkably high work hardening properties.
- The optimum design of the thread section reduces the processing burden on each flutes cutting chamfer.
- Reduces cutting resistance and increases tool life.
- Chip discharge is stable and achieves a good surface finished.
- Improved strength and life expectancy is achieved.
- Use with either synchronous or asynchronous thread processing.

Tapping Data

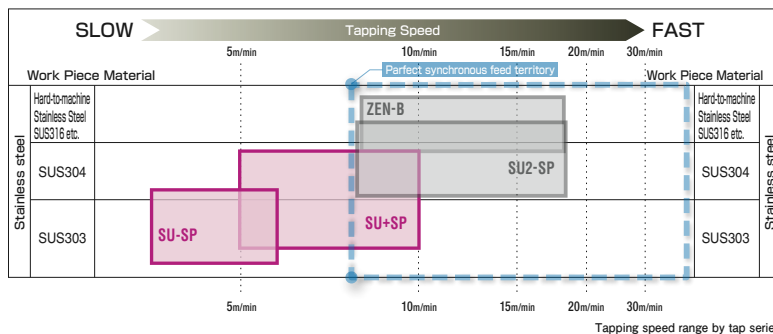
Tapping Conditions [M6×1]

Workpiece Material	SUS304 (90HRB)
Bored Hole Size	φ5.0
Tapping length	9mm, blind hole
Tapping Speed	8m/min
Machinery Type	Vertical machining center (perfect synchronous feed)
Tapping Fluid	Non-water soluble cutting oil (chlorine-free)



Speed chart

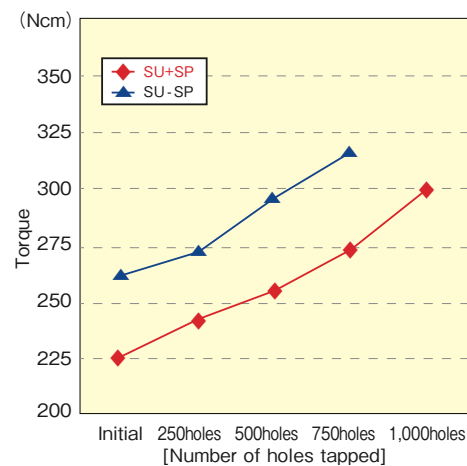
Taps for blind hole tapping of stainless steel.



Notes

When tapping SS400 materials and soft steel materials with SU+SP, use a synchronized feed machine. If they are tapped with a non-synchronized feed drilling machine or the like, the internal thread may widen.

Change in tapping torque



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

1

JIS

Spiral Fluted Taps
(for blind hole) ①Spiral Fluted Taps
(for through hole) ②Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

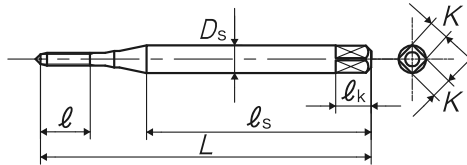
Dies ⑩

Center Drills
Centering Tools ⑪Precision Machinery/
Medical Surgical Instruments ⑫

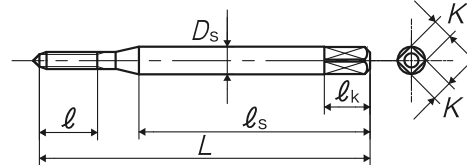
JIS

①-114

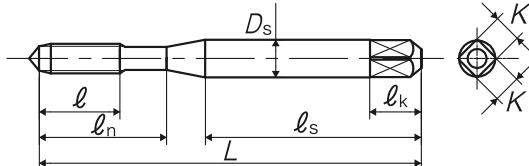
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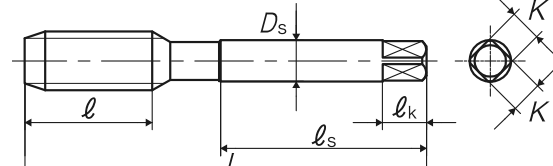
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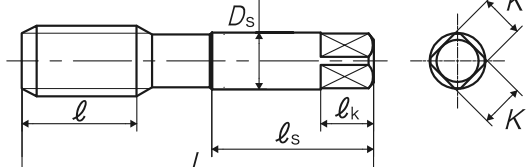
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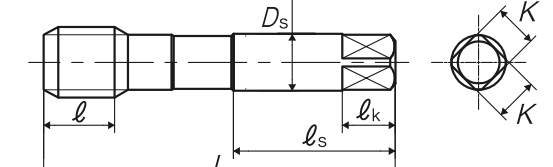
TYPE:4



TYPE:5



TYPE:6



SU+SP Spiral Fluted Taps for Stainless Steels

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	MSRP
For Metric Threads													
M2 × 0.4	P1	SUPP2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,910
M2 × 0.4	P2	SUPQ2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 3,090 ※
M2 × 0.4	P3	SUPR2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 3,090 ※
M2.3 × 0.4	P1	SUPP2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,820 ※
M2.3 × 0.4	P2	SUPQ2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,820 ※
M2.3 × 0.4	P3	SUPR2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,820 ※
M2.5 × 0.45	P1	SUPP2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,360
M2.5 × 0.45	P2	SUPQ2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,360 ※
M2.5 × 0.45	P3	SUPR2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,360 ※
M2.6 × 0.45	P1	SUPP2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,360
M2.6 × 0.45	P2	SUPQ2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,360 ※
M2.6 × 0.45	P3	SUPR2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,360 ※
M3 × 0.5	P1	SUPP3.0G	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,560
M3 × 0.5	P2	SUPQ3.0G	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,660 ※
M3 × 0.5	P3	SUPR3.0G	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,660 ※
3M0.6	P1	SUPP3.0H	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,660 ※
M3.5 × 0.6	P1	SUPP3.5H	2.5P	52	11	16	29	5	4	7	3	3	¥ 1,660 ※
M3.5 × 0.6	P3	SUPR3.5H	2.5P	52	11	16	29	5	4	7	3	3	¥ 1,660 ※
M4 × 0.7	P2	SUPQ4.0I	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,560
M4 × 0.7	P3	SUPR4.0I	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,660 ※
M4 × 0.7	P4	SUPS4.0I	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,660 ※
4M0.75	P2	SUPQ4.0J	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,660 ※
M5 × 0.8	P2	SUPQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,590
M5 × 0.8	P3	SUPR5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,680 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

JIS

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	MSRP
M5 × 0.8	P4	SUPS5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,680 ※
5M0.9	P2	SUPQ5.0L	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,680 ※
M6 × 1	P2	SUPQ6.0M	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,720
M6 × 1	P3	SUPR6.0M	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,840 ※
M6 × 1	P4	SUPS6.0M	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,840 ※

SU-SP Spiral Fluted Taps for Stainless Steels

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	MSRP
For Metric Threads													
M1.4 × 0.3	P1	SUMP1.4C	2.5P	36	5.4	-	24	3	2.5	5	2	1	¥ 4,050 ※
M1.6 × 0.35	P1	SUMP1.6D	2.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,870 ※
M1.7 × 0.35	P1	SUMP1.7D	2.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,870 ※
M1.7 × 0.35	P2	SUMQ1.7D	2.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,870 ※
M6 × 0.75	P2	SUMQ6.0J	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,590 ※
M7 × 1	P2	SUMQ7.0M	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,240 ※
M8 × 1.25	P2	SUMQ8.0N	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,420
M8 × 1.25	P3	SUMR8.0N	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,570 ※
M8 × 1.25	P4	SUMS8.0N	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,570 ※
M8 × 1	P2	SUMQ8.0M	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,920 ※
M8 × 0.75	P2	SUMQ8.0J	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 3,310 ※
M10 × 1.5	P2	SUMQ010O	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,060
M10 × 1.5	P3	SUMR010O	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,260 ※
M10 × 1.5	P4	SUMS010O	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,260 ※
M10 × 1.25	P2	SUMQ010N	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,060
M10 × 1.25	P3	SUMR010N	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,260 ※
M10 × 1.25	P4	SUMS010N	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,260 ※
M10 × 1	P2	SUMQ010M	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,880 ※
M10 × 1	P4	SUMS010M	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,880 ※
M12 × 1.75	P2	SUMQ012P	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,340
M12 × 1.75	P3	SUMR012P	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,620 ※
M12 × 1.75	P4	SUMS012P	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,620 ※
M12 × 1.5	P2	SUMQ012O	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,620
M12 × 1.5	P3	SUMR012O	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,620 ※
M12 × 1.5	P4	SUMS012O	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,620 ※
M12 × 1.25	P2	SUMQ012N	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,620
M12 × 1.25	P3	SUMR012N	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,620 ※
M12 × 1.25	P4	SUMS012N	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,620 ※
M12 × 1	P2	SUMQ012M	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 5,450 ※
M14 × 2	P2	SUMQ014Q	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 6,300
M14 × 2	P3	SUMR014Q	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 6,300 ※
M14 × 2	P4	SUMS014Q	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 6,300 ※
M14 × 1.5	P2	SUMQ014O	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 6,300
M14 × 1.5	P4	SUMS014O	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 6,300 ※
M14 × 1	P2	SUMQ014M	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 7,320 ※
M16 × 2	P2	SUMQ016Q	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 7,920
M16 × 2	P3	SUMR016Q	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
M16 × 2	P4	SUMS016Q	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※

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Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

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

SU-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	MSRP
M16 × 1.5	P2	SUMQ016O	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430
M16 × 1.5	P4	SUMS016O	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
M18 × 2.5	P3	SUMR018R	2.5P	100	33	-	51	14	11	14	4	4	¥ 11,300
M18 × 2.5	P4	SUMS018R	2.5P	100	33	-	51	14	11	14	4	4	¥ 11,300 ※
M18 × 1.5	P2	SUMQ018O	2.5P	100	33	-	51	14	11	14	4	4	¥ 11,300
M18 × 1.5	P4	SUMS018O	2.5P	100	33	-	51	14	11	14	4	4	¥ 11,300 ※
M20 × 2.5	P3	SUMR020R	2.5P	105	33	-	50	15	12	15	4	5	¥ 15,500
M20 × 2.5	P4	SUMS020R	2.5P	105	33	-	50	15	12	15	4	5	¥ 15,500 ※
M20 × 1.5	P3	SUMR020O	2.5P	105	33	-	50	15	12	15	4	5	¥ 15,500
M20 × 1.5	P4	SUMS020O	2.5P	105	33	-	50	15	12	15	4	5	¥ 15,500 ※
M22 × 2.5	P3	SUMR022R	2.5P	115	33	-	55	17	13	16	4	5	¥ 19,800
M22 × 2.5	P4	SUMS022R	2.5P	115	33	-	55	17	13	16	4	5	¥ 19,800 ※
M22 × 2.5	P5	SUMT022R	2.5P	115	33	-	55	17	13	16	4	5	¥ 19,800 ※
M22 × 1.5	P3	SUMR022O	2.5P	115	33	-	55	17	13	16	4	5	¥ 19,800 ※
M22 × 1.5	P4	SUMS022O	2.5P	115	33	-	55	17	13	16	4	5	¥ 19,800 ※
M24 × 3	P3	SUMR024S	2.5P	120	39	-	55	19	15	18	4	5	¥ 24,500
M24 × 3	P4	SUMS024S	2.5P	120	39	-	55	19	15	18	4	5	¥ 24,500 ※
M24 × 3	P5	SUMT024S	2.5P	120	39	-	55	19	15	18	4	5	¥ 24,500 ※
M24 × 2	P3	SUMR024Q	2.5P	120	39	-	55	19	15	18	4	5	¥ 24,500 ※
M24 × 1.5	P3	SUMR024O	2.5P	120	39	-	55	19	15	18	4	5	¥ 24,500 ※
M24 × 1.5	P4	SUMS024O	2.5P	120	39	-	55	19	15	18	4	5	¥ 24,500 ※
M27 × 3	P3	SUMR027S	2.5P	130	39	-	60	20	15	18	4	5	¥ 34,400 ※
M27 × 1.5	P3	SUMR027O	2.5P	130	39	-	60	20	15	18	4	5	¥ 34,400 ※
M30 × 3.5	P4	SUMS030T	2.5P	135	46	-	62	23	17	20	4	5	¥ 43,800 ※
M30 × 1.5	P3	SUMR030O	2.5P	135	46	-	62	23	17	20	4	5	¥ 43,800 ※
M33 × 3.5	P4	SUMS033T	2.5P	145	46	-	67	25	19	22	4	5	¥ 50,900 ※
M36 × 4	P4	SUMS036U	2.5P	155	52	-	71	28	21	24	4	5	¥ 59,000 ※
M39 × 4	P4	SUMS039U	2.5P	165	52	-	76	30	23	26	4	5	¥ 67,700 ※
M42 × 4.5	P4	SUMS042V	2.5P	175	59	-	81	32	26	30	4	5	¥ 82,300 ※
M42 × 1.5	P3	SUMR042O	2.5P	175	27	-	81	32	26	30	4	6	¥ 82,300 ※
M45 × 4.5	P4	SUMS045V	2.5P	180	59	-	83	35	26	30	4	5	¥ 95,300 ※
M48 × 5	P4	SUMS048W	2.5P	185	65	-	85	38	29	32	4	5	¥ 120,000 ※
For Unified Threads													
No.2-56UNC	P1	SUMPUN2E	2.5P	42	8.1	12	27	3	2.5	5	2	3	¥ 3,230 ※
No.3-48UNC	P1	SUMPUN3F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,740 ※
No.4-40UNC	P1	SUMPUN4H	2.5P	46	9	14	25	4	3.2	6	2	3	¥ 2,090 ※
No.4-48UNF	P1	SUMPUN4F	2.5P	46	9	14	25	4	3.2	6	2	3	¥ 2,090 ※
No.5-40UNC	P1	SUMPUN5H	2.5P	52	11	16	28	5	4	7	3	3	¥ 1,950 ※
No.5-44UNF	P1	SUMPUN5G	2.5P	52	11	16	28	5	4	7	3	3	¥ 1,950 ※
No.6-32UNC	P2	SUMQUN6J	2.5P	52	11	17	27	5	4	7	3	3	¥ 1,950 ※
No.6-40UNF	P1	SUMPUN6H	2.5P	52	11	17	27	5	4	7	3	3	¥ 1,950 ※
No.8-32UNC	P2	SUMQUN8J	2.5P	60	13	22	31	5.5	4.5	7	3	3	¥ 1,970 ※
No.8-36UNF	P2	SUMQUN8I	2.5P	60	13	22	31	5.5	4.5	7	3	3	¥ 1,970 ※
No.10-24UNC	P2	SUMQUNAM	2.5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,970 ※
No.10-32UNF	P2	SUMQUNAJ	2.5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,970 ※
No.12-24UNC	P2	SUMQUNCM	2.5P	62	15	26	32	6	4.5	7	3	3	¥ 2,100 ※
No.12-28UNF	P2	SUMQUNCK	2.5P	62	15	26	32	6	4.5	7	3	3	¥ 2,100 ※
1/4-20UNC	P2	SUMQU04N	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,100 ※
1/4-28UNF	P2	SUMQU04K	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,100 ※

※ = Specified Distribution Items. Made to order products.

① Spiral Fluted Tap Series for blind hole

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

JIS

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	MSRP
5/16-18UNC	P2	SUMQU05O	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,960 ※
5/16-24UNF	P2	SUMQU05M	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,960 ※
3/8-16UNC	P2	SUMQU06P	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,790 ※
3/8-24UNF	P2	SUMQU06M	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,790 ※
7/16-14UNC	P3	SUMRU07Q	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 5,330 ※
7/16-20UNF	P2	SUMQU07N	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 5,330 ※
1/2-13UNC	P3	SUMRU08R	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 5,650 ※
1/2-20UNF	P2	SUMQU08N	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 5,650 ※
5/8-11UNC	P3	SUMRU10U	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
5/8-18UNF	P2	SUMQU10O	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
3/4-10UNC	P3	SUMRU12V	2.5P	105	33	-	50	15	12	15	4	5	¥ 15,500 ※
3/4-16UNF	P3	SUMRU12P	2.5P	105	33	-	50	15	12	15	4	5	¥ 15,500 ※
7/8-9UNC	P3	SUMRU14W	2.5P	115	33	-	55	17	13	16	4	5	¥ 21,700 ※
7/8-14UNF	P3	SUMRU14Q	2.5P	115	33	-	55	17	13	16	4	5	¥ 21,700 ※
1 -8UNC	P3	SUMRU16X	2.5P	125	39	-	58	19	15	18	4	5	¥ 32,000 ※
1 -12UNF	P3	SUMRU16S	2.5P	125	39	-	58	19	15	18	4	5	¥ 32,000 ※
For Whitworth Threads													
3/16W24	P2	SUMQW03M	2.5P	60	13	21	32	5.5	4.5	7	3	3	¥ 1,970 ※
1/4W20	P2	SUMQW04N	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,100 ※
5/16W18	P2	SUMQW05O	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,960 ※
3/8W16	P2	SUMQW06P	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,790 ※
7/16W14	P3	SUMRW07Q	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 5,330 ※
1/2W12	P3	SUMRW08S	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 5,650 ※
9/16W12	P3	SUMRW09S	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
5/8W11	P3	SUMRW10U	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
3/4W10	P3	SUMRW12V	2.5P	105	33	-	50	15	12	15	4	5	¥ 15,500 ※
7/8W9	P3	SUMRW14W	2.5P	115	33	-	55	17	13	16	4	5	¥ 21,700 ※
1 W8	P3	SUMRW16X	2.5P	125	39	-	58	19	15	18	4	5	¥ 32,000 ※

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

Spiral Fluted Tap Series for blind hole

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

1

ANSI

Spiral Fluted Taps
(for blind hole)

1

Spiral Fluted Taps
(for through hole)

2

Spiral Pointed Taps
(for through hole)

3

Hand Taps

4

Cemented
Carbide Taps

5

Roll Taps

6

Special Thread Taps
Simple Inspection Tools

7

Pipe Taps

8

Thread Mills
Premium Thread Mills

9

Dies

10

Center Drills
Centering Tools

11

Precision Machinery/
Medical Surgical Instruments

12

ANSI

ZELX SS SP

Spiral Fluted Taps for Stainless Steels



Specification

HSS

OX
Oxide



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

Tapping Speed depending on Materials

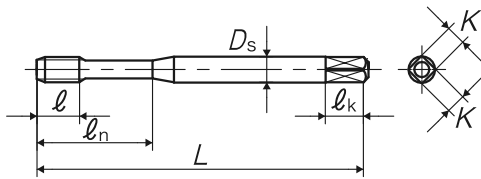
Medium carbon steels
中炭素鋼
~10
(m/min)

High carbon steels
高炭素鋼
~10
(m/min)

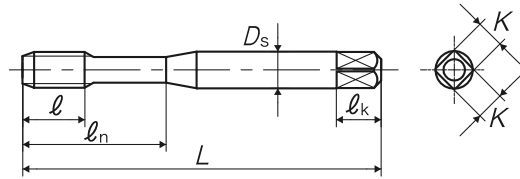
Alloy steels
合金鋼
~10
(m/min)

Stainless steels
ステンレス鋼
~10
(m/min)

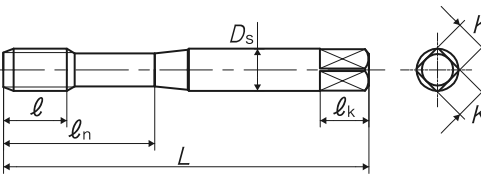
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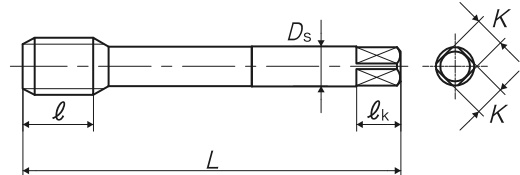
TYPE:2



TYPE:3



TYPE:4



Segment : 1D

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	TYPE
For Metric Threads											
M3 × 0.5	D3	Y74615	2.5P	1.937	0.197	0.625	0.141	0.11	0.187	3	1
M3 × 0.5	D3	Y74015	1.5P	1.937	0.197	0.625	0.141	0.11	0.187	3	1
M3.5 × 0.6	D4	Y74616	2.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
M4 × 0.7	D4	Y74617	2.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
M4 × 0.7	D4	Y74017	1.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
M5 × 0.8	D4	Y74619	2.5P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
M5 × 0.8	D4	Y74019	1.5P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
M6 × 1	D5	Y74620	2.5P	2.5	0.433	1	0.255	0.191	0.312	3	2
M6 × 1	D5	Y74020	1.5P	2.5	0.433	1	0.255	0.191	0.312	3	2
M7 × 1	D5	Y74621	2.5P	2.718	0.433	1.125	0.318	0.238	0.375	3	3
M8 × 1.25	D5	Y74623	2.5P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
M8 × 1.25	D5	Y74023	1.5P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
M8 × 1	D5	Y74622	2.5P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
M8 × 1	D5	Y74022	1.5P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
M10 × 1.5	D6	Y74625	2.5P	2.937	0.512	1.25	0.381	0.286	0.437	3	3
M10 × 1.5	D6	Y74025	1.5P	2.937	0.512	1.25	0.381	0.286	0.437	3	3
M10 × 1.25	D5	Y74624	2.5P	2.937	0.472	1.25	0.381	0.286	0.437	3	3

· This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

ANSI

1-118

① Spiral Fluted Tap Series for blind hole

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

ANSI

ZELX SS SP Spiral Fluted Taps for Stainless Steels

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M10 × 1.25	D5	Y74024	1.5P	2.937	0.472	1.25	0.381	0.286	0.437	3	3
M12 × 1.75	D6	Y74627	2.5P	3.375	0.591	-	0.367	0.275	0.437	3	4
M12 × 1.75	D6	Y74027	1.5P	3.375	0.591	-	0.367	0.275	0.437	3	4
M12 × 1.25	D5	Y74626	2.5P	3.375	0.551	-	0.367	0.275	0.437	3	4
M12 × 1.25	D5	Y74026	1.5P	3.375	0.551	-	0.367	0.275	0.437	3	4
M14 × 2	D7	Y74629	2.5P	3.593	0.709	-	0.429	0.322	0.5	3	4
M14 × 2	D7	Y74029	1.5P	3.593	0.709	-	0.429	0.322	0.5	3	4
M14 × 1.5	D6	Y74628	2.5P	3.593	0.551	-	0.429	0.322	0.5	3	4
M14 × 1.5	D6	Y74028	1.5P	3.593	0.551	-	0.429	0.322	0.5	3	4
M16 × 2	D7	Y74631	2.5P	3.812	0.709	-	0.48	0.36	0.562	3	4
M16 × 2	D7	Y74031	1.5P	3.812	0.709	-	0.48	0.36	0.562	3	4
M16 × 1.5	D6	Y74630	2.5P	3.812	0.551	-	0.48	0.36	0.562	3	4
M16 × 1.5	D6	Y74030	1.5P	3.812	0.551	-	0.48	0.36	0.562	3	4
M18 × 2.5	D7	Y74633	2.5P	4.031	0.787	-	0.542	0.406	0.625	4	4
M18 × 1.5	D6	Y74632	2.5P	4.031	0.551	-	0.542	0.406	0.625	4	4
M20 × 2.5	D7	Y74635	2.5P	4.468	0.787	-	0.652	0.489	0.687	4	4
M24 × 3	D8	Y74639	2.5P	4.906	0.984	-	0.76	0.57	0.75	4	4
For Unified Threads											
No.2-56UNC	GH2	Y84623	2.5P	1.75	0.157	0.437	0.141	0.11	0.187	2	1
No.3-48UNC	GH2	Y84600	2.5P	1.812	0.197	0.5	0.141	0.11	0.187	2	1
No.4-40UNC	GH2	Y84601	2.5P	1.875	0.236	0.562	0.141	0.11	0.187	2	1
No.4-40UNC	GH2	Y84001	1.5P	1.875	0.236	0.562	0.141	0.11	0.187	2	1
No.4-40UNC	GH3	Y84602	2.5P	1.875	0.236	0.562	0.141	0.11	0.187	2	1
No.4-40UNC	GH3	Y84002	1.5P	1.875	0.236	0.562	0.141	0.11	0.187	2	1
No.4-40UNC	GH4	Y84629	2.5P	1.875	0.236	0.562	0.141	0.11	0.187	2	1
No.4-40UNC	GH5	Y84634	2.5P	1.875	0.236	0.562	0.141	0.11	0.187	2	1
No.4-40UNC	GH5	Y84034	1.5P	1.875	0.236	0.562	0.141	0.11	0.187	2	1
No.4-48UNF	GH2	Y84683	2.5P	1.875	0.236	0.562	0.141	0.11	0.187	2	1
No.4-48UNF	GH2	Y84083	1.5P	1.875	0.236	0.562	0.141	0.11	0.187	2	1
No.5-40UNC	GH2	Y84603	2.5P	1.937	0.236	0.625	0.141	0.11	0.187	3	1
No.5-40UNC	GH2	Y84003	1.5P	1.937	0.236	0.625	0.141	0.11	0.187	3	1
No.6-32UNC	GH2	Y84604	2.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH2	Y84004	1.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH3	Y84605	2.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH3	Y84005	1.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH4	Y84636	2.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH5	Y84635	2.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH5	Y84035	1.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH6	Y84659	2.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH7	Y84665	2.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-40UNF	GH2	Y84684	2.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-40UNF	GH2	Y84084	1.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-40UNF	GH3	Y84685	2.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-40UNF	GH3	Y84085	1.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.8-32UNC	GH2	Y84606	2.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH2	Y84006	1.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH3	Y84607	2.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH3	Y84007	1.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH4	Y84638	2.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH5	Y84637	2.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1

① Spiral Fluted Taps (for blind hole)

② Spiral Fluted Taps (for through hole)

③ Spiral Pointed Taps (for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills Premium Thread Mills

⑩ Dies

⑪ Center Drills Centering Tools

⑫ Precision Machinery/ Medical Surgical Instruments

ANSI

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

ZELX SS SP Spiral Fluted Taps for Stainless Steels

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
No.8-32UNC	GH5	Y84037	1.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH6	Y84660	2.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH7	Y84667	2.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-36UNF	GH3	Y84687	2.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.10-24UNC	GH2	Y84624	2.5P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH3	Y84609	2.5P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH3	Y84009	1.5P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH5	Y84639	2.5P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH5	Y84039	1.5P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH6	Y84690	2.5P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH7	Y84669	2.5P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH2	Y84611	2.5P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH3	Y84610	2.5P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH3	Y84010	1.5P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH4	Y84630	2.5P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH5	Y84640	2.5P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH5	Y84040	1.5P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH6	Y84662	2.5P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH7	Y84670	2.5P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.12-24UNC	GH3	Y84688	2.5P	2.375	0.354	0.937	0.22	0.165	0.281	3	1
No.12-28UNF	GH3	Y84689	2.5P	2.375	0.276	0.937	0.22	0.165	0.281	3	1
1/4-20UNC	GH3	Y84613	2.5P	2.5	0.433	1	0.255	0.191	0.312	3	2
1/4-20UNC	GH3	Y84013	1.5P	2.5	0.433	1	0.255	0.191	0.312	3	2
1/4-20UNC	GH5	Y84643	2.5P	2.5	0.433	1	0.255	0.191	0.312	3	2
1/4-20UNC	GH5	Y84043	1.5P	2.5	0.433	1	0.255	0.191	0.312	3	2
1/4-20UNC	GH7	Y84673	2.5P	2.5	0.433	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	Y84614	2.5P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	Y84014	1.5P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	Y84631	2.5P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH5	Y84644	2.5P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH5	Y84044	1.5P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH6	Y84664	2.5P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH7	Y84674	2.5P	2.5	0.354	1	0.255	0.191	0.312	3	2
5/16-18UNC	GH3	Y84615	2.5P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
5/16-18UNC	GH3	Y84015	1.5P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
5/16-18UNC	GH5	Y84645	2.5P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
5/16-18UNC	GH5	Y84045	1.5P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
5/16-18UNC	GH7	Y84675	2.5P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	Y84616	2.5P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	Y84016	1.5P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	Y84632	2.5P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH5	Y84646	2.5P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH5	Y84046	1.5P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH7	Y84676	2.5P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	Y84617	2.5P	2.937	0.551	1.25	0.381	0.286	0.437	3	3
3/8-16UNC	GH3	Y84017	1.5P	2.937	0.551	1.25	0.381	0.286	0.437	3	3
3/8-16UNC	GH5	Y84647	2.5P	2.937	0.551	1.25	0.381	0.286	0.437	3	3
3/8-16UNC	GH5	Y84047	1.5P	2.937	0.551	1.25	0.381	0.286	0.437	3	3
3/8-16UNC	GH7	Y84677	2.5P	2.937	0.551	1.25	0.381	0.286	0.437	3	3
3/8-16UNC	GH7	Y84077	1.5P	2.937	0.551	1.25	0.381	0.286	0.437	3	3

1

ANSI

Spiral Fluted Taps
(for blind hole) ①Spiral Fluted Taps
(for through hole) ②Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪Precision Machinery/
Medical Surgical Instruments ⑫

ANSI

①-120

① Spiral Fluted Tap Series for blind hole

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

ANSI

ZELX SS SP Spiral Fluted Taps for Stainless Steels

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
3/8-24UNF	GH3	Y84618	2.5P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	Y84018	1.5P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	Y84633	2.5P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	Y84033	1.5P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH5	Y84648	2.5P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH5	Y84048	1.5P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH7	Y84678	2.5P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
7/16-14UNC	GH3	Y84619	2.5P	3.156	0.591	-	0.323	0.242	0.406	3	4
7/16-14UNC	GH3	Y84019	1.5P	3.156	0.591	-	0.323	0.242	0.406	3	4
7/16-14UNC	GH5	Y84649	2.5P	3.156	0.591	-	0.323	0.242	0.406	3	4
7/16-14UNC	GH5	Y84049	1.5P	3.156	0.591	-	0.323	0.242	0.406	3	4
7/16-14UNC	GH7	Y84679	2.5P	3.156	0.591	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH3	Y84620	2.5P	3.156	0.472	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH3	Y84020	1.5P	3.156	0.472	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH5	Y84650	2.5P	3.156	0.472	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH5	Y84050	1.5P	3.156	0.472	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH6	Y84691	2.5P	3.156	0.472	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH7	Y84680	2.5P	3.156	0.472	-	0.323	0.242	0.406	3	4
1/2-13UNC	GH3	Y84621	2.5P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH3	Y84021	1.5P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH5	Y84651	2.5P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH5	Y84051	1.5P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH7	Y84681	2.5P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	Y84622	2.5P	3.375	0.472	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	Y84022	1.5P	3.375	0.472	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH5	Y84652	2.5P	3.375	0.472	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH5	Y84052	1.5P	3.375	0.472	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH6	Y84692	2.5P	3.375	0.472	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH7	Y84682	2.5P	3.375	0.472	-	0.367	0.275	0.437	3	4
9/16-12UNC	GH3	Y84653	2.5P	3.593	0.709	-	0.429	0.322	0.5	3	4
9/16-12UNC	GH3	Y84053	1.5P	3.593	0.709	-	0.429	0.322	0.5	3	4
9/16-18UNF	GH3	Y84654	2.5P	3.593	0.512	-	0.429	0.322	0.5	3	4
9/16-18UNF	GH3	Y84054	1.5P	3.593	0.512	-	0.429	0.322	0.5	3	4
9/16-18UNF	GH5	Y84698	2.5P	3.593	0.512	-	0.429	0.322	0.5	3	4
5/8-11UNC	GH3	Y84625	2.5P	3.812	0.748	-	0.48	0.36	0.562	3	4
5/8-11UNC	GH3	Y84025	1.5P	3.812	0.748	-	0.48	0.36	0.562	3	4
5/8-11UNC	GH5	Y84655	2.5P	3.812	0.748	-	0.48	0.36	0.562	3	4
5/8-11UNC	GH5	Y84055	1.5P	3.812	0.748	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH3	Y84626	2.5P	3.812	0.512	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH3	Y84026	1.5P	3.812	0.512	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH5	Y84656	2.5P	3.812	0.512	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH5	Y84056	1.5P	3.812	0.512	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH7	Y84672	2.5P	3.812	0.512	-	0.48	0.36	0.562	3	4
3/4-10UNC	GH3	Y84627	2.5P	4.25	0.827	-	0.59	0.442	0.687	4	4
3/4-10UNC	GH3	Y84027	1.5P	4.25	0.827	-	0.59	0.442	0.687	4	4
3/4-10UNC	GH5	Y84657	2.5P	4.25	0.827	-	0.59	0.442	0.687	4	4
3/4-16UNF	GH3	Y84628	2.5P	4.25	0.591	-	0.59	0.442	0.687	4	4
3/4-16UNF	GH3	Y84028	1.5P	4.25	0.591	-	0.59	0.442	0.687	4	4
3/4-16UNF	GH5	Y84658	2.5P	4.25	0.591	-	0.59	0.442	0.687	4	4
3/4-16UNF	GH7	Y84686	2.5P	4.25	0.591	-	0.59	0.442	0.687	4	4

① Spiral Fluted Taps (for blind hole)

② Spiral Fluted Taps (for through hole)

③ Spiral Pointed Taps (for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills Premium Thread Mills

⑩ Dies

⑪ Center Drills Centering Tools

⑫ Precision Machinery/ Medical Surgical Instruments

ANSI

①-121

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

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

ZELX SS SP Spiral Fluted Taps for Stainless Steels

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
7/8-9UNC	GH4	Y84695	2.5P	4.687	0.827	-	0.697	0.523	0.75	4	4
7/8-14UNF	GH4	Y84696	2.5P	4.687	0.709	-	0.697	0.523	0.75	4	4
7/8-14UNF	GH6	Y84694	2.5P	4.687	0.709	-	0.697	0.523	0.75	4	4
1 -8UNC	GH4	Y84697	2.5P	5.125	0.984	-	0.8	0.6	0.812	4	4
1 -12UNF	GH4	Y84668	2.5P	5.125	0.709	-	0.8	0.6	0.812	4	4
1 1/8-7UNC	GH6	Y84701	2.5P	5.437	1.181	-	0.896	0.672	0.875	4	4
1 1/8-12UNF	GH5	Y84702	2.5P	5.437	0.787	-	0.896	0.672	0.875	4	4
1 1/4-7UNC	GH6	Y84703	2.5P	5.75	1.181	-	1.021	0.766	1	4	4
1 1/4-12UNF	GH5	Y84705	2.5P	5.75	0.787	-	1.021	0.766	1	4	4
1 3/8-6UNC	GH6	Y84706	2.5P	6.062	1.575	-	1.108	0.831	1.062	4	4
1 3/8-12UNF	GH5	Y84707	2.5P	6.062	0.787	-	1.108	0.831	1.062	4	4
1 1/2-6UNC	GH6	Y84709	2.5P	6.375	1.575	-	1.233	0.925	1.125	4	4
1 1/2-12UNF	GH5	Y84711	2.5P	6.375	0.787	-	1.233	0.925	1.125	4	4
1 3/4-5UNC	GH7	Y84714	2.5P	7	1.772	-	1.43	1.072	1.25	4	4
2 -4 1/2UNC	GH7	Y84715	2.5P	7.625	1.969	-	1.644	1.233	1.375	4	4

1

ANSI

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

ANSI

①-122

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-123

DIN

SP-VA

Spiral Fluted Taps for Stainless Steels



Specification

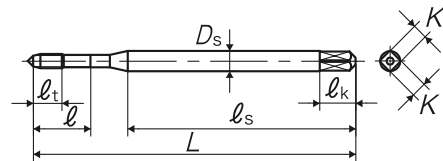


■ Most suitable for stainless steels, sticky and tending to work-harden, as well as chrome steels and molybdenum steels, blind hole use.

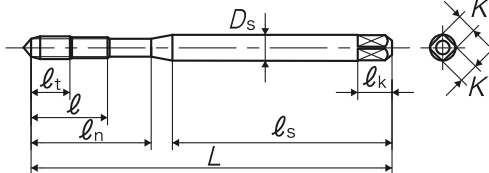
Tapping Speeds depending on Materials

Medium carbon steels 中炭素鋼 ~10 (m/min)	High carbon steels 高炭素鋼 ~10 (m/min)	Alloy steels 合金鋼 ~10 (m/min)	Stainless steels ステンレス鋼 ~10 (m/min)
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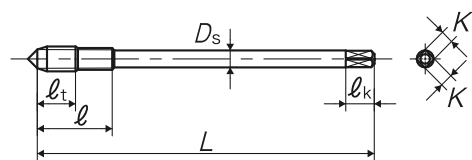
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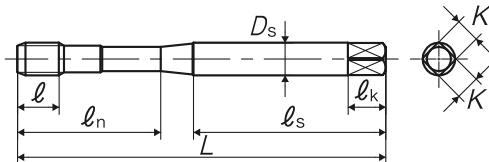
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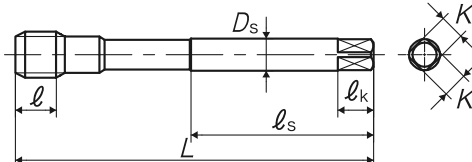
TYPE: 3



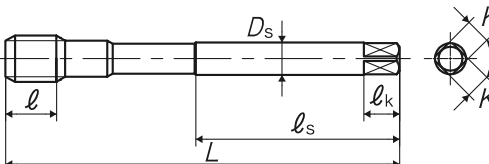
TYPE: 4



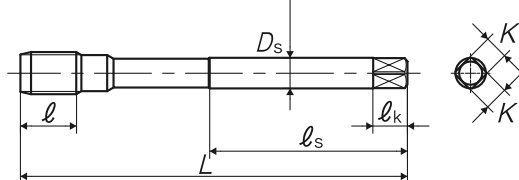
TYPE: 5



TYPE: 6



TYPE: 7



Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

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

Segment : 1D (G=1H)

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
For Metric Threads													
M2 × 0.4	ISO2	SD2.0EAGEX	2.5P	45	4	8	-	32	2.8	2.1	5	2	1
M2.5 × 0.45	ISO2	SD2.5FAGEX	2.5P	50	4	8	15	33	2.8	2.1	5	2	2
M3 × 0.5	ISO2	SD3.0GAGEX	2.5P	56	5	9	18	34	3.5	2.7	6	2	2
M3 × 0.5	ISO3	SD3.0GMGEX	2.5P	56	5	9	18	34	3.5	2.7	6	2	2
M4 × 0.7	ISO2	SD4.0IAGEX	2.5P	63	7	13	21	38	4.5	3.4	6	3	2
M4 × 0.7	ISO3	SD4.0IMGEX	2.5P	63	7	13	21	38	4.5	3.4	6	3	2
M5 × 0.8	ISO2	SD5.0KAGEX	2.5P	70	9	14	25	39	6	4.9	8	3	2
M5 × 0.8	ISO3	SD5.0KMGEX	2.5P	70	9	14	25	39	6	4.9	8	3	2
M6 × 1	ISO2	SD6.0MAGEX	2.5P	80	11	15	30	45	6	4.9	8	3	2
M6 × 1	ISO3	SD6.0MMGEX	2.5P	80	11	15	30	45	6	4.9	8	3	2
M6 × 0.75	ISO2	SM6.0JAGEX	2.5P	80	8	15	-	-	4.5	3.4	6	3	3
M8 × 1.25	ISO2	SD8.0NAGEX	2.5P	90	-	12	35	47	8	6.2	9	3	4
M8 × 1.25	ISO2	SG8.0NAGEX	2.5P	90	-	12	-	46	6	4.9	8	3	5
M8 × 1.25	ISO3	SD8.0NMGEX	2.5P	90	-	12	35	47	8	6.2	9	3	4
M8 × 1	ISO2	SM8.0MAGEX	2.5P	90	-	12	-	46	6	4.9	8	3	5
M8 × 0.75	ISO2	SM8.0JAGEX	2.5P	80	-	12	-	41	6	4.9	8	3	5
M10 × 1.5	ISO2	SD010OAGEX	2.5P	100	-	13	39	52.5	10	8	11	3	4
M10 × 1.5	ISO2	SG010OAGEX	2.5P	100	-	13	-	51	7	5.5	8	3	5
M10 × 1.5	ISO3	SD010OMGEX	2.5P	100	-	13	39	52.5	10	8	11	3	4
M10 × 1.25	ISO2	SM010NAGEX	2.5P	100	-	13	-	51	7	5.5	8	3	5
M10 × 1	ISO2	SM010MAGEX	2.5P	90	-	13	-	46	7	5.5	8	3	5
M12 × 1.75	ISO2	SG012PAGEX	2.5P	110	-	15	-	56	9	7	10	3	6
M12 × 1.75	ISO3	SG012PMGEX	2.5P	110	-	15	-	56	9	7	10	3	6
M12 × 1.5	ISO2	SM012OAGEX	2.5P	100	-	15	-	51	9	7	10	3	5
M12 × 1.25	ISO2	SM012NAGEX	2.5P	100	-	15	-	51	9	7	10	3	5
M12 × 1	ISO2	SM012MAGEX	2.5P	100	-	15	-	51	9	7	10	3	5
M14 × 2	ISO2	SG014QAGEX	2.5P	110	-	18	-	56	11	9	12	3	6
M14 × 1.5	ISO2	SM014OAGEX	2.5P	100	-	14	-	51	11	9	12	3	5
M14 × 1	ISO2	SM014MAGEX	2.5P	100	-	14	-	51	11	9	12	3	5
M16 × 2	ISO2	SG016QAGEX	2.5P	110	-	18	-	56	12	9	12	3	6
M16 × 1.5	ISO2	SM016OAGEX	2.5P	100	-	14	-	51	12	9	12	3	5
M16 × 1	ISO2	SM016MAGEX	2.5P	100	-	14	-	51	12	9	12	3	5
M18 × 2.5	ISO2	SG018RAGEX	2.5P	125	-	20	-	64	14	11	14	4	6
M18 × 1.5	ISO2	SM018OAGEX	2.5P	110	-	14	-	56	14	11	14	4	5
M20 × 2.5	ISO2	SG020RAGEX	2.5P	140	-	20	-	71	16	12	15	4	6
M20 × 1.5	ISO2	SM020OAGEX	2.5P	125	-	14	-	64	16	12	15	4	5
M22 × 2.5	ISO2	SG022RAGEX	2.5P	140	-	20	-	71	18	14.5	17	4	6
M22 × 1.5	ISO2	SM022OAGEX	2.5P	125	-	14	-	64	18	14.5	17	4	5
M24 × 3	ISO2	SG024SAGEX	2.5P	160	-	25	-	82	18	14.5	17	4	6
M24 × 2	ISO2	SM024QAGEX	2.5P	140	-	18	-	71	18	14.5	17	4	5
M24 × 1.5	ISO2	SM024OAGEX	2.5P	140	-	18	-	71	18	14.5	17	4	5
M27 × 3	ISO2	SG027SAGEX	2.5P	160	-	25	-	82	20	16	19	4	6
M27 × 2	ISO2	SM027QAGEX	2.5P	140	-	20	-	71	20	16	19	4	5
M30 × 3.5	ISO2	SG030TAGEX	2.5P	180	-	30	-	92	22	18	21	4	6
M30 × 2	ISO2	SM030QAGEX	2.5P	150	-	20	-	77	22	18	21	4	5
M30 × 1.5	ISO2	SM030OAGEX	2.5P	150	-	20	-	77	22	18	21	4	5
M36 × 4	ISO2	SG036UAGEX	2.5P	200	-	40	-	102	28	22	25	4	6
For Unified Threads													
No.4-40UNC	2B	SDUN4HXGEX	2.5P	56	11	5	18	34	3.5	2.7	6	2	2

1

DIN

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

DIN

①-124

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

① Spiral Fluted Tap Series for blind hole

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

DIN

SP-VA Spiral Fluted Taps for Stainless Steels

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
No.6-32UNC	2B	SDUN6JXGEX	2.5P	56	7	11	19	32	4	3	6	3	2
No.8-32UNC	2B	SDUN8JXGEX	2.5P	63	7	13	21	38	4.5	3.4	6	3	2
No.10-24UNC	2B	SDUNAMXGEX	2.5P	70	9	14	24	39	6	4.9	8	3	2
No.10-32UNF	2B	SDUNAJXGEX	2.5P	70	9	14	24	39	6	4.9	8	3	2
1/4-20UNC	2B	SDU04NXGEX	2.5P	80	11	15	30	42	7	5.5	8	3	2
1/4-28UNF	2B	SDU04KXGEX	2.5P	80	11	15	30	42	7	5.5	8	3	2
5/16-18UNC	2B	SDU05OXGEX	2.5P	90	-	12	35	47	8	6.2	9	3	4
5/16-24UNF	2B	SMU05MXGEX	2.5P	90	-	12	-	46	6	4.9	8	3	5
3/8-16UNC	2B	SDU06PXGEX	2.5P	100	-	13	39	54.5	9	7	10	3	4
3/8-24UNF	2B	SMU06MXGEX	2.5P	100	-	13	-	51	7	5.5	8	3	5
7/16-14UNC	2B	SGU07QXGEX	2.5P	100	-	13	-	51	8	6.2	9	3	6
7/16-20UNF	2B	SMU07NXGEX	2.5P	100	-	13	-	51	8	6.2	9	3	5
1/2-13UNC	2B	SGU08RXGEX	2.5P	110	-	15	-	56	9	7	10	3	6
1/2-20UNF	2B	SMU08NXGEX	2.5P	100	-	15	-	51	9	7	10	3	5
9/16-12UNC	2B	SGU09SXGEX	2.5P	110	-	18	-	56	11	9	12	3	6
9/16-18UNF	2B	SMU09OXGEX	2.5P	100	-	14	-	51	11	9	12	3	5
5/8-11UNC	2B	SGU10UXGEX	2.5P	110	-	18	-	56	12	9	12	3	6
5/8-18UNF	2B	SMU10OXGEX	2.5P	100	-	14	-	51	12	9	12	3	5
3/4-10UNC	2B	SGU12VXGEX	2.5P	125	-	20	-	64	14	11	14	4	6
3/4-16UNF	2B	SMU12PXGEX	2.5P	110	-	14	-	56	14	11	14	4	5
7/8-9UNC	2B	SGU14WXGEX	2.5P	140	-	20	-	71	18	14.5	17	4	6
7/8-14UNF	2B	SMU14QXGEX	2.5P	125	-	20	-	64	18	14.5	17	4	5
1 -8UNC	2B	SGU16XXGEX	2.5P	160	-	25	-	82	18	14.5	17	4	6
1 -12UNF	2B	SMU16SXGEX	2.5P	140	-	18	-	71	18	14.5	17	4	5
1 1/8-7UNC	2B	SGU18YXGEX	2.5P	180	-	30	-	92	22	18	21	4	6
1 1/8-8UN	2B	SMU18XXGEX	2.5P	180	-	28	-	92	22	18	21	4	5
1 1/8-12UNF	2B	SMU18SXGEX	2.5P	150	-	20	-	77	22	18	21	4	5
1 1/4-7UNC	2B	SGU20YXGEX	2.5P	180	-	30	-	92	22	18	21	4	6
1 1/4-8UN	2B	SMU20XXGEX	2.5P	180	-	28	-	92	22	18	21	4	5
1 1/4-12UNF	2B	SMU20SXGEX	2.5P	150	-	20	-	77	22	18	21	4	5
1 3/8-6UNC	2B	SGU22ZXGEX	2.5P	200	-	40	-	102	28	22	25	4	6
1 3/8-8UN	2B	SMU22XXGEX	2.5P	200	-	30	-	102	28	22	25	4	5
1 3/8-12UNF	2B	SMU22SXGEX	2.5P	170	-	20	-	87	28	22	25	4	5
1 1/2-6UNC	2B	SGU24ZXGEX	2.5P	200	-	40	-	102	32	24	27	4	6
1 1/2-8UN	2B	SMU24XXGEX	2.5P	200	-	30	-	102	32	24	27	4	5
1 1/2-12UNF	2B	SMU24SXGEX	2.5P	170	-	20	-	87	32	24	27	4	5
1 5/8-8UN	2B	SMU26XXGEX	2.5P	200	-	30	-	102	32	24	27	4	5
1 3/4-8UN	2B	SMU28XXGEX	2.5P	200	-	40	-	102	36	29	32	4	5
2 -8UN	2B	SMU32XXGEX	2.5P	225	-	40	-	115	40	32	35	4	5
For PF Threads													
G 1/8-28	-	SVG0020GEX	2.5P	90	-	12	-	46	7	5.5	8	3	7
G 1/4-19	-	SVG0040GEX	2.5P	100	-	14	-	51	11	9	12	3	7
G 3/8-19	-	SVG0060GEX	2.5P	100	-	14	-	51	12	9	12	3	7
G 1/2-14	-	SVG0080GEX	2.5P	125	-	18	-	64	16	12	15	4	7
G 3/4-14	-	SVG0120GEX	2.5P	140	-	20	-	71	20	16	19	4	7
G 1 -11	-	SVG0160GEX	2.5P	160	-	20	-	82	25	20	23	4	7

⑫

Precision Machinery/
Medical Surgical Instruments

⑪

Center Drills/
Centering Tools

⑨

Thread Mills
Premium Thread Mills

⑧

Pipe Taps

⑦

Special Thread Taps
Simple Inspection Tools

⑥

Roll Taps

⑤

Cemented
Carbide Taps

④

Hand Taps

③

Spiral Pointed Taps
(for through hole)

②

Spiral Fluted Taps
(for through hole)

①

Spiral Fluted Taps
(for blind hole)

DIN

①-125

Think threads with
YAMAWA

This product is different from JIS products in shape and dimensions, please be careful when using.

Spiral Fluted Tap Series for blind hole

DIN

SP+VA

Spiral Fluted Taps for Stainless Steels



Specification

HSS

OX
Oxide



Synchro
nized

<2D

■ Most suitable for stainless steels, sticky and tending to work-harden, as well as chrome steels and molybdenum steels, blind hole use.

Tapping Speeds depending on Materials

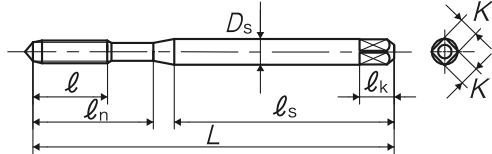
Medium carbon steels
中炭素鋼
5~15
(m/min)

High carbon steels
高炭素鋼
5~15
(m/min)

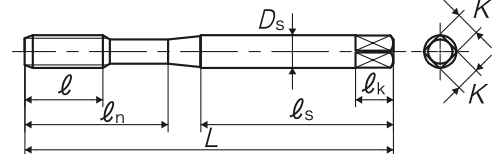
Alloy steels
合金鋼
5~15
(m/min)

Stainless steels
ステンレス鋼
5~10
(m/min)

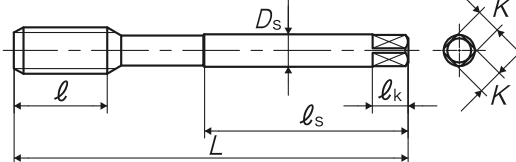
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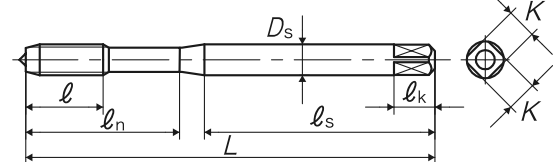
TYPE:2



TYPE:3



TYPE:4



Segment : 1D

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	ISO2	SE3.0GAGEX	2.5P	56	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2	SE4.0IAGEX	2.5P	63	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2	SE5.0KAGEX	2.5P	70	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2	SE6.0MAGEX	2.5P	80	15	30	45	6	4.9	8	3	1
M6 × 1	ISO2	SZ6.0MAGEX	2.5P	80	15	30	45	6	4.9	8	3	4
M8 × 1.25	ISO2	SE8.0NAGEX	2.5P	90	19	35	47	8	6.2	9	3	2
M8 × 1.25	ISO2	SZ8.0NAGEX	2.5P	90	19	35	48	8	6.2	9	3	4
M10 × 1.5	ISO2	SE10.0AGEX	2.5P	100	23	39	52.5	10	8	11	4	2
M10 × 1.5	ISO2	SZ10.0AGEX	2.5P	100	23	39	53	10	8	11	4	4
M12 × 1.75	ISO2	SZ12.0PAGEX	2.5P	110	26	45	56	12	9	12	4	4
M12 × 1.75	ISO2	SH12.0PAGEX	2.5P	110	26	-	56	9	7	10	4	3

· This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

1

DIN

Spiral Fluted Taps
(for blind hole)

1

Spiral Fluted Taps
(for through hole)

2

Spiral Pointed Taps
(for through hole)

3

Hand Taps

4

Cemented
Carbide Taps

5

Roll Taps

6

Special Thread Taps
Simple Inspection Tools

7

Pipe Taps

8

Thread Mills
Premium Thread Mills

9

Dies

10

Center Drills
Centering Tools

11

Precision Machinery/
Medical Surgical Instruments

12

DIN

1-126

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-127



SP-VA E

Spiral Fluted Taps for Stainless Steels E(1.5P)



Specification

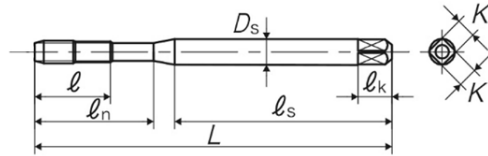


■ Most suitable for stainless steels, sticky and tending to work-harden, as well as chrome steels and molybdenum steels, blind hole use.

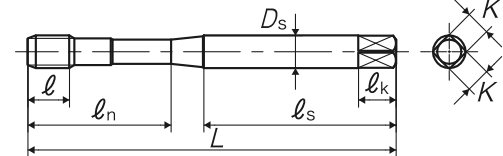
Tapping Speeds depending on Materials

Medium carbon steels 中炭素鋼 ~10 (m/min)	High carbon steels 高炭素鋼 ~10 (m/min)	Alloy steels 合金鋼 ~10 (m/min)	Stainless steels ステンレス鋼 ~10 (m/min)
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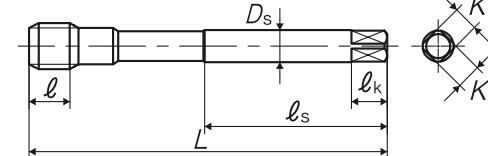
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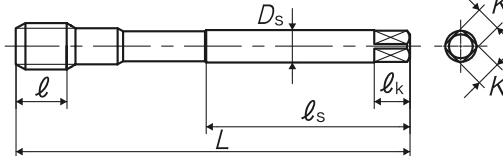
TYPE:2



TYPE:3



TYPE:4



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
For Metric Threads												
M3 × 0.5	ISO2	SD3.0GAGEXA	E(1.5P)	56	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2	SD4.0IAGEXA	E(1.5P)	63	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2	SD5.0KAGEXA	E(1.5P)	70	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2	SD6.0MAGEXA	E(1.5P)	80	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2	SD8.0NAGEXA	E(1.5P)	90	12	35	47	8	6.2	9	3	2
M8 × 1	ISO2	SM8.0MAGEXA	E(1.5P)	90	12	-	46	6	4.9	8	3	3
M10 × 1.5	ISO2	SD010OAGEXA	E(1.5P)	100	13	39	52.5	10	8	11	4	2
M10 × 1.25	ISO2	SM010NAGEXA	E(1.5P)	100	13	-	51	7	5.5	8	4	3
M10 × 1	ISO2	SM010MAGEXA	E(1.5P)	90	13	-	46	7	5.5	8	4	3
M12 × 1.75	ISO2	SG012PAGEXA	E(1.5P)	110	15	-	56	9	7	10	4	4
M12 × 1.5	ISO2	SM012OAGEXA	E(1.5P)	100	15	-	51	9	7	10	4	3
M12 × 1.25	ISO2	SM012NAGEXA	E(1.5P)	100	15	-	51	9	7	10	4	3
M14 × 2	ISO2	SG014QAGEXA	E(1.5P)	110	18	-	56	11	9	12	4	4
M14 × 1.5	ISO2	SM014OAGEXA	E(1.5P)	100	14	-	51	11	9	12	4	3
M16 × 2	ISO2	SG016QAGEXA	E(1.5P)	110	18	-	56	12	9	12	4	4
M16 × 1.5	ISO2	SM016OAGEXA	E(1.5P)	100	14	-	51	12	9	12	4	3
M20 × 2.5	ISO2	SG020RAGEXA	E(1.5P)	140	20	-	71	16	12	15	4	4

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

Spiral Fluted Tap Series for blind hole

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

1

DIN

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

DIN

①-128

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
For Unified Threads												
1/4-20UNC	2B	SDU04NXGEXA	E(1.5P)	80	15	30	42	7	5.5	8	3	1
5/16-18UNC	2B	SDU05OXGEXA	E(1.5P)	90	12	35	47	8	6.2	9	3	2
3/8-16UNC	2B	SDU06PXGEXA	E(1.5P)	100	13	39	54.5	9	7	10	3	2
7/16-14UNC	2B	SGU07QXGEXA	E(1.5P)	100	13	-	51	8	6.2	9	4	4
1/2-13UNC	2B	SGU08RXGEXA	E(1.5P)	110	15	-	56	9	7	10	4	4
9/16-12UNC	2B	SGU09SXGEXA	E(1.5P)	110	18	-	56	11	9	12	4	4
5/8-11UNC	2B	SGU10UXGEXA	E(1.5P)	110	18	-	56	12	9	12	4	4
3/4-10UNC	2B	SGU12VXGEXA	E(1.5P)	125	20	-	64	14	11	14	4	4
7/8-9UNC	2B	SGU14WXGEXA	E(1.5P)	140	20	-	71	18	14.5	17	4	4
1-8UNC	2B	SGU16XXGEXA	E(1.5P)	160	25	-	82	18	14.5	17	4	4
1 1/8-7UNC	2B	SGU18YXGEXA	E(1.5P)	180	30	-	92	22	18	21	4	4
1 1/4-7UNC	2B	SGU20YXGEXA	E(1.5P)	180	30	-	92	22	18	21	4	4
1 3/8-6UNC	2B	SGU22ZXGEXA	E(1.5P)	200	40	-	102	28	22	25	4	4
1 1/2-6UNC	2B	SGU24ZXGEXA	E(1.5P)	200	40	-	102	32	24	27	4	4

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-129

DIN

SP-VA

Spiral Fluted Taps for Stainless Steels, Coated



Specification

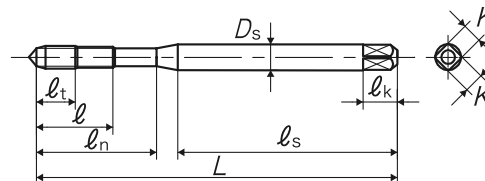


■ Most suitable for blind hole use in stainless steels that are sticky and tends to work-hardening, as well as chrome steels and molybdenum steels. The coating provides the benefits of increased cutting speed and improved life.

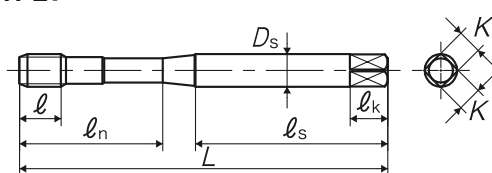
Tapping Speeds depending on Materials

Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼	Stainless steels ステンレス鋼
~15 (m/min)	~15 (m/min)	~15 (m/min)	~10 (m/min)

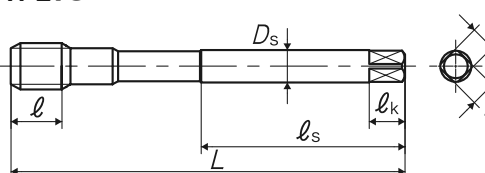
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1D

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
For Metric Threads													
M3 × 0.5	ISO2	SD3.0GAGET	2.5P	56	5	9	18	34	3.5	2.7	6	2	1 ▲
M4 × 0.7	ISO2	SD4.0IAGET	2.5P	63	7	13	21	38	4.5	3.4	6	3	1 ▲
M5 × 0.8	ISO2	SD5.0KAGET	2.5P	70	9	14	25	39	6	4.9	8	3	1 ▲
M6 × 1	ISO2	SD6.0MAGET	2.5P	80	11	15	30	45	6	4.9	8	3	1 ▲
M8 × 1.25	ISO2	SD8.0NAGET	2.5P	90	-	12	35	47	8	6.2	9	3	2 ▲
M10 × 1.5	ISO2	SD010OAGET	2.5P	100	-	13	39	52.5	10	8	11	3	2 ▲
M12 × 1.75	ISO2	SG012PAGET	2.5P	110	-	15	-	56	9	7	10	3	3 ▲
M14 × 2	ISO2	SG014QAGET	2.5P	110	-	18	-	56	11	9	12	3	3 ▲
M16 × 2	ISO2	SG016QAGET	2.5P	110	-	18	-	56	12	9	12	3	3 ▲
M20 × 2.5	ISO2	SG020RAGET	2.5P	140	-	20	-	71	16	12	15	4	3 ▲

Note: Products marked with an ▲ in the stock column are available while supplies last.

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

Spiral Fluted Tap Series for blind hole

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

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-130

SU-SP LH

Spiral Fluted Tap for Stainless Steel for Left-Hand Threads



Specification

HSS

OX
Oxide



■ Ideal spiral fluted taps for machining blind holes for left-hand threads in stainless steel, chromium steel, and molybdenum steel. These materials have remarkably high work hardening properties.

Tapping Speeds depending on Materials

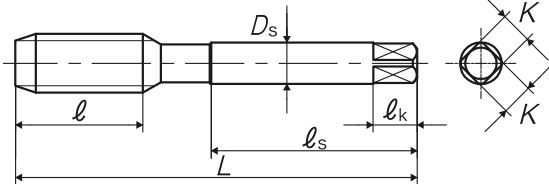
Medium carbon steels
中炭素鋼
~10
(m/min)

High carbon steels
高炭素鋼
~10
(m/min)

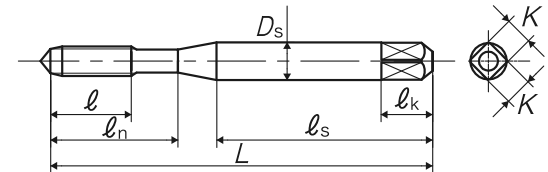
Alloy steels
合金鋼
~10
(m/min)

Stainless steels
ステンレス鋼
~10
(m/min)

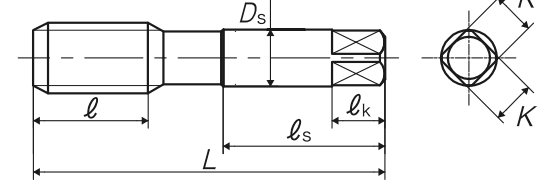
TYPE:2



TYPE:1



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	MSRP
For Metric Threads													
M2 × 0.4	P1	SUMP2.0E-L	2.5P	42	7.2	12	27	3	2.5	5	2	1	¥ 4,240 ※
M2.3 × 0.4	P1	SUMP2.3E-L	2.5P	42	7.2	12	27	3	2.5	5	2	1	¥ 3,870 ※
M2.5 × 0.45	P1	SUMP2.5F-L	2.5P	46	8.1	14	29	3	2.5	5	2	1	¥ 3,240 ※
M2.6 × 0.45	P1	SUMP2.6F-L	2.5P	46	8.1	14	29	3	2.5	5	2	1	¥ 3,240 ※
M3 × 0.5	P1	SUMP3.0G-L	2.5P	46	9	14	26	4	3.2	6	3	1	¥ 2,270 ※
M4 × 0.7	P2	SUMQ4.0I-L	2.5P	52	11	17	29	5	4	7	3	1	¥ 2,270 ※
M5 × 0.8	P2	SUMQ5.0K-L	2.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 2,310 ※
M6 × 1	P2	SUMQ6.0M-L	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 2,520 ※
M8 × 1.25	P2	SUMQ8.0N-L	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 3,460 ※
M10 × 1.5	P2	SUMQ010O-L	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 4,400 ※
M10 × 1.25	P2	SUMQ010N-L	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 4,400 ※
M12 × 1.75	P2	SUMQ012P-L	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,220 ※
M12 × 1.5	P2	SUMQ012O-L	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,220 ※
M12 × 1.25	P2	SUMQ012N-L	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,220 ※
M14 × 2	P2	SUMQ014Q-L	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 8,480 ※
M16 × 2	P2	SUMQ016Q-L	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 11,400 ※
M18 × 2.5	P3	SUMR018R-L	2.5P	100	33	-	51	14	11	14	4	2	¥ 15,300 ※
M20 × 2.5	P3	SUMR020R-L	2.5P	105	33	-	50	15	12	15	4	3	¥ 20,800 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-131

SUS

SU2-SP

Spiral Fluted Taps for Tough Stainless Steels



Specification



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

Product Features

- The SU2-SP is a spiral flute tap for hard to cut stainless steel that is optimum for blind hole machining of stainless steel such as SUS 316 and SUS 317.
- It is a special design of full threads for the first few threads and the balance are half the thread height.
- With this special shape, it is effective in the prevention of flute chipping of the full threads. It reduces tapping torque and has good abrasion resistance while allowing to maintain the screw thread guide specifications.
- It has improved chip ejection from the unique flute design.

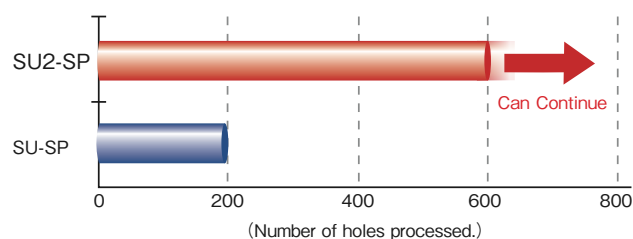
Tapping Data

Thread Size [M12×1.75]

Workpiece Material	SUS316
Bored Hole Size	φ10.3
Tapping Length	25mm blind hole
Machinery Type	CNC tapping machine
Tapping Speed	8m/min
Tapping Fluid	Non-water soluble cutting oil



BLF Shape



Characteristics of stainless steel

- It work hardens easily. Chip welding occurs frequently.
- Chip ejection is poor. • It tends to shrink.
- Tool friction tends to occur.

In general wear, austenitic stainless steel have the characteristics described above and are regarded as difficult to cut materials. Among these stainless steels there are a few that have a higher Ni content. Austenitic stainless steel with the Ni content of more than 10% such as SUS 316 is regarded as "difficult-to-cut stainless steel".

Type of Material	Element Content (%)	
	Ni	Cr
SUS303	8.00 ~ 10.00	17.00 ~ 19.00
SUS304	8.00 ~ 10.50	18.00 ~ 20.00
SUS316	10.00 ~ 14.00	16.00 ~ 18.00
SUS317	11.00 ~ 15.00	18.00 ~ 20.00

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

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

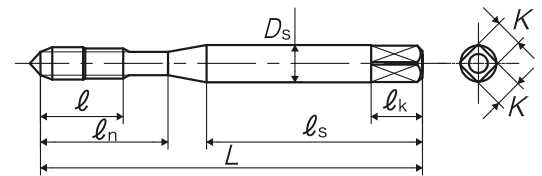
Precision Machinery/
Medical Surgical Instruments

⑫

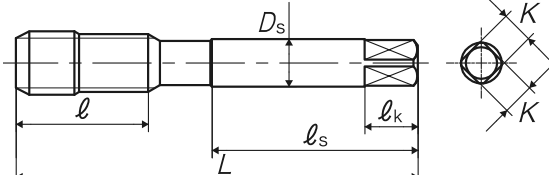
JIS

①-132

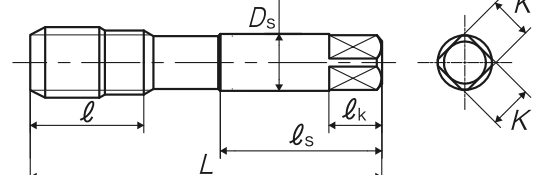
TYPE: 1



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	MSRP
For Metric Threads													
M3 × 0.5	P2	SU2MQ3.0G	3P	46	9	14	26	4	3.2	6	3	1	¥ 1,810
M3.5 × 0.6	P2	SU2MQ3.5H	3P	52	11	16	29	5	4	7	3	1	¥ 1,810 ※
M4 × 0.7	P2	SU2MQ4.0I	3P	52	11	17	29	5	4	7	3	1	¥ 1,810
M5 × 0.8	P2	SU2MQ5.0K	3P	60	13	22	33	5.5	4.5	7	3	1	¥ 1,820
M6 × 1	P2	SU2MQ6.0M	3P	62	15	26	33	6	4.5	7	3	1	¥ 2,000
M8 × 1.25	P3	SU2MR8.0N	3P	70	19	-	36	6.2	5	8	3	2	¥ 2,790
M10 × 1.5	P3	SU2MR010O	3P	75	23	-	38	7	5.5	8	3	2	¥ 3,540
M10 × 1.25	P3	SU2MR010N	3P	75	23	-	38	7	5.5	8	3	2	¥ 3,540
M10 × 1	P3	SU2MR010M	3P	75	23	-	38	7	5.5	8	3	2	¥ 4,220 ※
M12 × 1.75	P3	SU2MR012P	3P	82	26	-	42	8.5	6.5	9	4	2	¥ 5,030
M12 × 1.5	P3	SU2MR012O	3P	82	26	-	42	8.5	6.5	9	4	2	¥ 5,030 ※
M12 × 1.25	P3	SU2MR012N	3P	82	26	-	42	8.5	6.5	9	4	2	¥ 5,030 ※
M12 × 1	P3	SU2MR012M	3P	82	26	-	42	8.5	6.5	9	4	2	¥ 5,910 ※
M14 × 2	P3	SU2MR014Q	3P	88	26	-	45	10.5	8	11	4	2	¥ 6,850 ※
M14 × 1.5	P3	SU2MR014O	3P	88	26	-	45	10.5	8	11	4	2	¥ 6,850 ※
M16 × 2	P3	SU2MR016Q	3P	95	26	-	48	12.5	10	13	4	2	¥ 9,160
M16 × 1.5	P3	SU2MR016O	3P	95	26	-	48	12.5	10	13	4	2	¥ 9,160 ※
M18 × 2.5	P4	SU2MS018R	3P	100	33	-	51	14	11	14	4	2	¥ 12,300 ※
M18 × 1.5	P3	SU2MR018O	3P	100	33	-	51	14	11	14	4	2	¥ 12,300 ※
M20 × 2.5	P4	SU2MS020R	3P	105	33	-	50	15	12	15	4	3	¥ 16,800
M20 × 1.5	P4	SU2MS020O	3P	105	33	-	50	15	12	15	4	3	¥ 16,800 ※
M22 × 2.5	P4	SU2MS022R	3P	115	33	-	55	17	13	16	4	3	¥ 21,400 ※
M22 × 1.5	P4	SU2MS022O	3P	115	33	-	55	17	13	16	4	3	¥ 21,400 ※
M24 × 3	P4	SU2MS024S	3P	120	39	-	55	19	15	18	4	3	¥ 26,600 ※
M24 × 1.5	P4	SU2MS024O	3P	120	39	-	55	19	15	18	4	3	¥ 26,600 ※

※ = Specified Distribution Items. Made to order products.

 Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-133



SU2-SP

Spiral Fluted Taps for Tough Stainless Steels



Specification

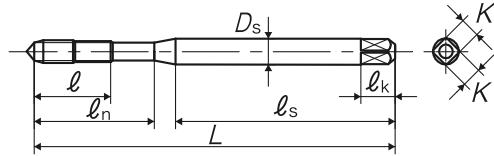


■ SU2-SP is the spiral fluted tap most suitable for tough stainless steels, blind hole use.

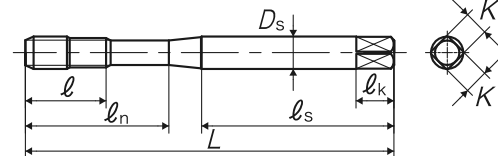
Tapping Speeds depending on Materials

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

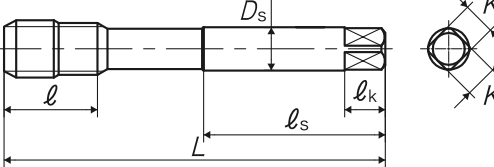
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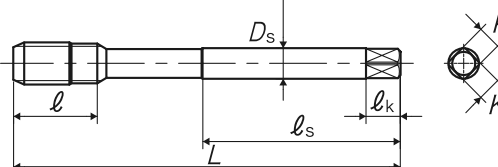
TYPE:2



TYPE:3



TYPE:4



Segment : 1D (G=1H)

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
For Metric Threads												
M3 × 0.5	ISO2	SD3.0GAGEXJ	3P	56	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2	SD4.0IAGEXJ	3P	63	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2	SD5.0KAGEXJ	3P	70	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2	SD6.0MAGEXJ	3P	80	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2	SD8.0NAGEXJ	3P	90	19	35	47	8	6.2	9	3	2
M10 × 1.5	ISO2	SD010OAGEXJ	3P	100	23	39	52.5	10	8	11	3	2
M12 × 1.75	ISO2	SG012PAGEXJ	3P	110	26	-	56	9	7	10	4	3
M14 × 2	ISO2	SG014QAGEXJ	3P	110	26	-	56	11	9	12	4	3
M16 × 2	ISO2	SG016QAGEXJ	3P	110	26	-	56	12	9	12	4	3
M18 × 2.5	ISO2	SG018RAGEXJ	3P	125	33	-	64	14	11	14	4	3
M20 × 2.5	ISO2	SG020RAGEXJ	3P	140	33	-	71	16	12	15	4	3
M22 × 2.5	ISO2	SG022RAGEXJ	3P	140	33	-	71	18	14.5	17	4	3
M24 × 3	ISO2	SG024SAGEXJ	3P	160	37	-	82	18	14.5	17	4	3

Think threads with
YAMAWA

・ This product is different from JIS products in shape and dimensions, please be careful when using.

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

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
For G Threads												
G 1/8-28	-	SVG0020GEXJ	3P	90	19	-	46	7	5.5	8	3	4
G 1/4-19	-	SVG0040GEXJ	3P	100	21	-	51	11	9	12	4	4
G 3/8-19	-	SVG0060GEXJ	3P	100	21	-	51	12	9	12	4	4
G 1/2-14	-	SVG0080GEXJ	3P	125	24	-	64	16	12	15	4	4
G 3/4-14	-	SVG0120GEXJ	3P	140	27	-	71	20	16	19	4	4

1

DIN

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

DIN

①-134

① Spiral Fluted Tap Series for blind hole

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	D _s	K	ℓ _k

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

S

SU-S-SP

Spiral Fluted Taps for Stainless Steels, Deep Hole Use



Specification

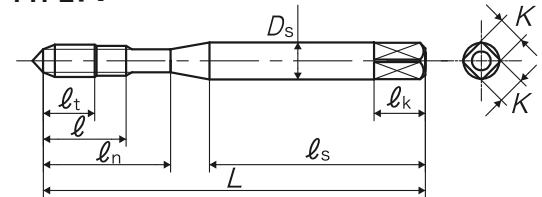


■SU-S-SP is the short spiral fluted tap for stainless steels suitable for stainless steels tending to work-harden and sticky, as well as chrome steels and molybdenum steels. Blind hole use. Deeper hole tapping is attainable.

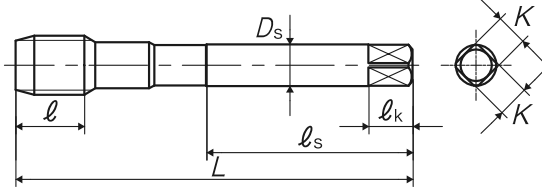
Tapping Speeds depending on Materials

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	Stainless steels ステンレス鋼
5~10 (m/min)	5~10 (m/min)	5~10 (m/min)	5~10 (m/min)	5~10 (m/min)

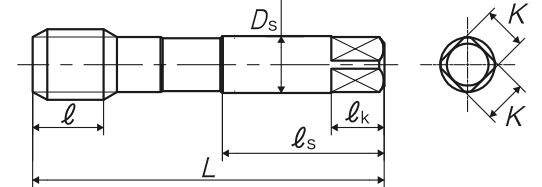
TYPE: 1



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	MSRP
For Metric Threads														
M3 × 0.5	P1	SSMP3.0G-SU	2.5P	46	5	9	14	26	4	3.2	6	3	1	¥ 1,740 ※
M4 × 0.7	P2	SSMQ4.0I-SU	2.5P	52	7	11	17	29	5	4	7	3	1	¥ 1,740 ※
M5 × 0.8	P2	SSMQ5.0K-SU	2.5P	60	9	13	22	33	5.5	4.5	7	3	1	¥ 1,750 ※
M6 × 1	P2	SSMQ6.0M-SU	2.5P	62	11	15	26	33	6	4.5	7	3	1	¥ 1,920 ※
M8 × 1.25	P2	SSMQ8.0N-SU	2.5P	70	-	12	-	36	6.2	5	8	3	2	¥ 2,680 ※
M10 × 1.5	P2	SSMQ10.0O-SU	2.5P	75	-	13	-	38	7	5.5	8	3	2	¥ 3,400 ※
M12 × 1.75	P2	SSMQ12P-SU	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 4,830 ※
M14 × 2	P2	SSMQ14Q-SU	2.5P	88	-	18	-	45	10.5	8	11	3	2	¥ 6,580 ※
M16 × 2	P2	SSMQ16Q-SU	2.5P	95	-	18	-	48	12.5	10	13	3	2	¥ 8,800 ※
M18 × 2.5	P3	SSMR18R-SU	2.5P	100	-	20	-	51	14	11	14	4	2	¥ 11,900 ※
M20 × 2.5	P3	SSMR20R-SU	2.5P	105	-	20	-	50	15	12	15	4	3	¥ 16,100 ※
M22 × 2.5	P3	SSMR22R-SU	2.5P	115	-	20	-	55	17	13	16	4	3	¥ 20,600 ※
M24 × 3	P3	SSMR24S-SU	2.5P	120	-	25	-	55	19	15	18	4	3	¥ 25,600 ※
M27 × 3	P3	SSMR27S-SU	2.5P	130	-	25	-	60	20	15	18	4	3	¥ 35,900 ※
M30 × 3.5	P4	SSMS030T-SU	2.5P	135	-	30	-	62	23	17	20	4	3	¥ 45,700 ※
M33 × 3.5	P4	SSMS033T-SU	2.5P	145	-	30	-	67	25	19	22	4	3	¥ 53,200 ※
M36 × 4	P4	SSMS036U-SU	2.5P	155	-	40	-	71	28	21	24	4	3	¥ 61,600 ※
M42 × 4.5	P4	SSMS042V-SU	2.5P	175	-	40	-	81	32	26	30	4	3	¥ 85,900 ※

JIS

Spiral Fluted Tap Series for blind hole

S

JIS

LS-SU-S-SP

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



Specification

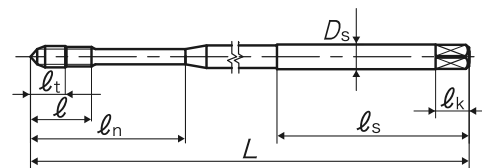


■LS-SU-S-SP is the long shank short spiral fluted tap for stainless steels suitable for stainless steels tending to work-harden and sticky, as well as chrome steels and molybdenum steels. Blind hole use. Deeper hole tapping is attainable.

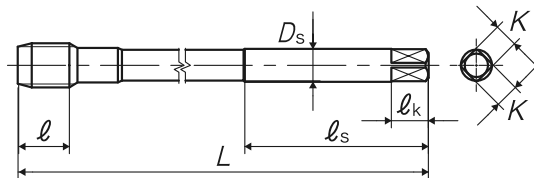
Tapping Speeds depending on Materials

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

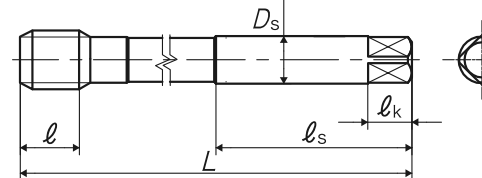
TYPE: 1



TYPE: 2



TYPE: 3



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	MSRP
For Metric Threads														
M3 × 0.5	P1	SY3.0GPGEXES	2.5P	100	5	9	28	40	4	3.2	6	2	1	¥ 4,750 ※
M4 × 0.7	P2	SY4.0IQGEXES	2.5P	100	7	11	31	40	5	4	7	3	1	¥ 4,340 ※
M4 × 0.7	P2	SY4.0IQGEXGS	2.5P	150	7	11	31	40	5	4	7	3	1	¥ 8,260 ※
M5 × 0.8	P2	SY5.0KQGEXES	2.5P	100	9	13	38	40	5.5	4.5	7	3	1	¥ 3,800 ※
M5 × 0.8	P2	SY5.0KQGEXGS	2.5P	150	9	13	38	40	5.5	4.5	7	3	1	¥ 6,420 ※
M6 × 1	P2	SY6.0MQGEXES	2.5P	100	11	15	45	40	6	4.5	7	3	1	¥ 3,250 ※
M6 × 1	P2	SY6.0MQGEXGS	2.5P	150	11	15	45	40	6	4.5	7	3	1	¥ 5,730 ※
M8 × 1.25	P2	SY8.0NQGEXES	2.5P	100	-	12	-	50	6.2	5	8	3	2	¥ 4,200 ※
M8 × 1.25	P2	SY8.0NQGEXGS	2.5P	150	-	12	-	50	6.2	5	8	3	2	¥ 7,150 ※
M8 × 1.25	P2	SY8.0NQGEXKS	2.5P	200	-	12	-	50	6.2	5	8	3	2	¥ 10,600 ※
M10 × 1.5	P2	SY010OQGEXES	2.5P	100	-	13	-	50	7	5.5	8	3	2	¥ 5,100 ※
M10 × 1.5	P2	SY010OQGEXGS	2.5P	150	-	13	-	50	7	5.5	8	3	2	¥ 8,310 ※
M10 × 1.5	P2	SY010OQGEXKS	2.5P	200	-	13	-	50	7	5.5	8	3	2	¥ 11,600 ※
M10 × 1.25	P2	SY010NQGEXES	2.5P	100	-	13	-	50	7	5.5	8	3	2	¥ 5,100 ※
M10 × 1.25	P2	SY010NQGEXGS	2.5P	150	-	13	-	50	7	5.5	8	3	2	¥ 8,310 ※
M12 × 1.75	P2	SY012PQGEXES	2.5P	100	-	15	-	50	8.5	6.5	9	3	2	¥ 6,250 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-136

① Spiral Fluted Tap Series for blind hole

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

JIS

LS-SU-S-SP Long Shank Spiral Fluted Taps for Stainless Steels, 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	MSRP
M12 × 1.75	P2	SY012PQGEXGS	2.5P	150	-	15	-	50	8.5	6.5	9	3	2	¥ 10,400 ※
M12 × 1.75	P2	SY012PQGEXKS	2.5P	200	-	15	-	50	8.5	6.5	9	3	2	¥ 14,700 ※
M12 × 1.5	P2	SY012OQGEXGS	2.5P	150	-	15	-	50	8.5	6.5	9	3	2	¥ 10,400 ※
M12 × 1.5	P2	SY012OQGEXKS	2.5P	200	-	15	-	50	8.5	6.5	9	3	2	¥ 14,700 ※
M12 × 1.25	P2	SY012NQGEXGS	2.5P	150	-	15	-	50	8.5	6.5	9	3	2	¥ 10,400 ※
M12 × 1.25	P2	SY012NQGEXKS	2.5P	200	-	15	-	50	8.5	6.5	9	3	2	¥ 14,700 ※
M14 × 2	P2	SY014QQGEXGS	2.5P	150	-	18	-	60	10.5	8	11	3	2	¥ 13,200 ※
M14 × 1.5	P2	SY014OQGEXGS	2.5P	150	-	14	-	60	10.5	8	11	3	2	¥ 13,200 ※
M16 × 2	P2	SY016QQGEXGS	2.5P	150	-	18	-	60	12.5	10	13	3	2	¥ 14,200 ※
M16 × 2	P2	SY016QQGEXKS	2.5P	200	-	18	-	60	12.5	10	13	3	2	¥ 18,700 ※
M16 × 1.5	P2	SY016OQGEXGS	2.5P	150	-	14	-	60	12.5	10	13	3	2	¥ 14,200 ※
M16 × 1.5	P2	SY016OQGEXKS	2.5P	200	-	14	-	60	12.5	10	13	3	2	¥ 18,700 ※
M18 × 2.5	P3	SY018RRGEXGS	2.5P	150	-	20	-	70	14	11	14	4	2	¥ 19,400 ※
M18 × 2.5	P3	SY018RRGEXKS	2.5P	200	-	20	-	70	14	11	14	4	2	¥ 24,400 ※
M18 × 1.5	P2	SY018OQGEXGS	2.5P	150	-	14	-	70	14	11	14	4	2	¥ 19,400 ※
M18 × 1.5	P2	SY018OQGEXKS	2.5P	200	-	14	-	70	14	11	14	4	2	¥ 24,400 ※
M20 × 2.5	P3	SY020RRGEXGS	2.5P	150	-	20	-	70	15	12	15	4	3	¥ 24,900 ※
M20 × 2.5	P3	SY020RRGEXKS	2.5P	200	-	20	-	70	15	12	15	4	3	¥ 31,000 ※
M20 × 1.5	P3	SY020ORGEXGS	2.5P	150	-	14	-	70	15	12	15	4	3	¥ 24,900 ※
M20 × 1.5	P3	SY020ORGEXKS	2.5P	200	-	14	-	70	15	12	15	4	3	¥ 31,000 ※
M22 × 2.5	P3	SY022RRGEXGS	2.5P	150	-	20	-	70	17	13	16	4	3	¥ 27,800 ※
M22 × 2.5	P3	SY022RRGEXKS	2.5P	200	-	20	-	70	17	13	16	4	3	¥ 34,400 ※
M22 × 1.5	P3	SY022ORGEXGS	2.5P	150	-	14	-	70	17	13	16	4	3	¥ 27,800 ※
M22 × 1.5	P3	SY022ORGEXKS	2.5P	200	-	14	-	70	17	13	16	4	3	¥ 34,400 ※
M24 × 3	P3	SY024SRGEXGS	2.5P	150	-	25	-	80	19	15	18	4	3	¥ 32,300 ※
M24 × 3	P3	SY024SRGEXKS	2.5P	200	-	25	-	80	19	15	18	4	3	¥ 38,700 ※
M24 × 1.5	P3	SY024ORGEXGS	2.5P	150	-	18	-	80	19	15	18	4	3	¥ 32,300 ※
M24 × 1.5	P3	SY024ORGEXKS	2.5P	200	-	18	-	80	19	15	18	4	3	¥ 38,700 ※

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

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

1

ANSI

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

ANSI

ZELX SS SP 6"

Long Shank Spiral Fluted Taps for Stainless Steels



Specification

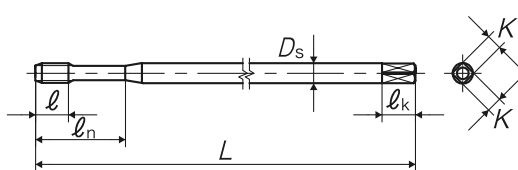


■ The ZELX SS SP 6" tap series is used for processing blind holes in chrome steels, molybdenum steels and stainless steels that are free machining and that workharden easily.

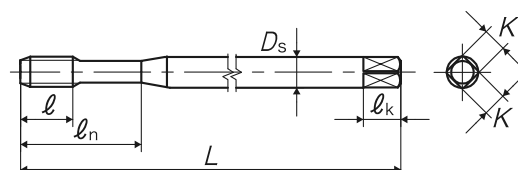
Tapping Speed depending on Materials

Low carbon steels 低炭素鋼 ~10 (m/min)	Medium carbon steels 中炭素鋼 ~10 (m/min)	High carbon steels 高炭素鋼 ~10 (m/min)	Stainless steels ステンレス鋼 ~10 (m/min)
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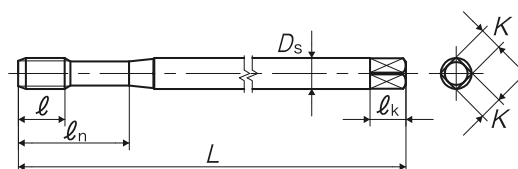
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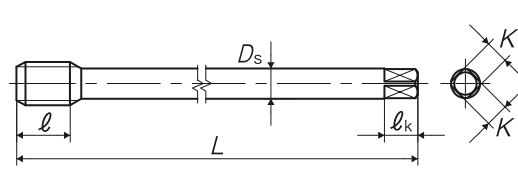
TYPE:2



TYPE:3



TYPE:4



Segment : 1D

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	TYPE
For Unified Threads											
No.2-56UNC	GH2	Y84523	2.5P	6	0.157	0.437	0.141	0.11	0.187	2	1
No.3-48UNC	GH2	Y84500	2.5P	6	0.197	0.5	0.141	0.11	0.187	2	1
No.4-40UNC	GH2	Y84501	2.5P	6	0.236	0.562	0.141	0.11	0.187	2	1
No.6-32UNC	GH3	Y84505	2.5P	6	0.276	0.687	0.141	0.11	0.187	3	1
No.8-32UNC	GH3	Y84507	2.5P	6	0.276	0.75	0.168	0.131	0.25	3	1
No.10-24UNC	GH3	Y84509	2.5P	6	0.354	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH3	Y84510	2.5P	6	0.276	0.875	0.194	0.152	0.25	3	1
1/4-20UNC	GH3	Y84513	2.5P	6	0.433	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	Y84514	2.5P	6	0.354	1	0.255	0.191	0.312	3	2
5/16-18UNC	GH3	Y84515	2.5P	6	0.472	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	Y84516	2.5P	6	0.394	1.125	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	Y84517	2.5P	6	0.551	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	Y84518	2.5P	6	0.394	1.25	0.381	0.286	0.437	3	3
7/16-14UNC	GH3	Y84519	2.5P	6	0.591	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH3	Y84520	2.5P	6	0.472	-	0.323	0.242	0.406	3	4
1/2-13UNC	GH3	Y84521	2.5P	6	0.63	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	Y84522	2.5P	6	0.472	-	0.367	0.275	0.437	3	4

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-139

S-SP

S-SP

Short Spiral Fluted Taps, Deep Hole Use



Specification

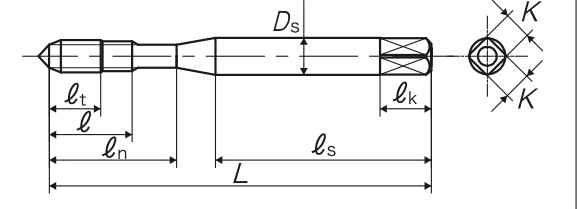


■ Due to short thread portion, friction becomes less and lubrication supply becomes better, and S-SP is the spiral fluted tap quite efficient for tapping deep holes that are 2.5 times deeper than the nominal dia.

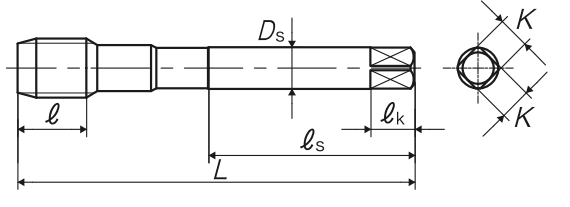
Tapping Speeds depending on Materials

Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼	Ductile cast irons 強靱鋳鉄
5~10 (m/min)	5~10 (m/min)	5~10 (m/min)	5~10 (m/min)

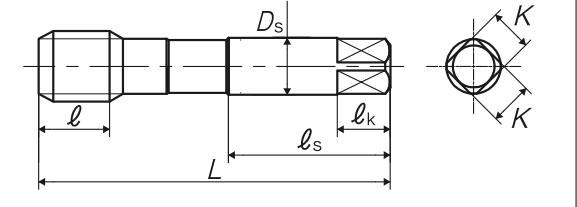
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1C

Size	Class	Code	Chamfer	L (mm)	ℓ_t (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads														
M2 × 0.4	P1	SSMP2.0E	2.5P	42	4	7.2	12	27	3	2.5	5	2	1	¥ 3,260
M2 × 0.4	P3	SSMR2.0E	2.5P	42	4	7.2	12	27	3	2.5	5	2	1	¥ 3,260 ※
M2.3 × 0.4	P1	SSMP2.3E	2.5P	42	4	7.2	12	27	3	2.5	5	2	1	¥ 2,970 ※
M2.3 × 0.4	P3	SSMR2.3E	2.5P	42	4	7.2	12	27	3	2.5	5	2	1	¥ 2,970 ※
M2.5 × 0.45	P1	SSMP2.5F	2.5P	46	4	8.1	14	29	3	2.5	5	2	1	¥ 2,490 ※
M2.5 × 0.45	P2	SSMQ2.5F	2.5P	46	4	8.1	14	29	3	2.5	5	2	1	¥ 2,490 ※
M2.5 × 0.45	P3	SSMR2.5F	2.5P	46	4	8.1	14	29	3	2.5	5	2	1	¥ 2,490 ※
M2.6 × 0.45	P1	SSMP2.6F	2.5P	46	4	8.1	14	29	3	2.5	5	2	1	¥ 2,490 ※
M2.6 × 0.45	P3	SSMR2.6F	2.5P	46	4	8.1	14	29	3	2.5	5	2	1	¥ 2,490 ※
M3 × 0.5	P1	SSMP3.0G-3	2.5P	46	5	9	14	26	4	3.2	6	3	1	¥ 1,740
M3 × 0.5	P2	SSMQ3.0G	2.5P	46	5	9	14	26	4	3.2	6	3	1	¥ 1,740 ※
M3 × 0.5	P3	SSMR3.0G	2.5P	46	5	9	14	26	4	3.2	6	3	1	¥ 1,740 ※
M3.5 × 0.6	P1	SSMP3.5H-3	2.5P	52	7	11	16	29	5	4	7	3	1	¥ 1,740 ※
M3.5 × 0.6	P2	SSMQ3.5H	2.5P	52	7	11	16	29	5	4	7	3	1	¥ 1,740 ※
M4 × 0.7	P2	SSMQ4.0I	2.5P	52	7	11	17	29	5	4	7	3	1	¥ 1,740
M4 × 0.7	P3	SSMR4.0I	2.5P	52	7	11	17	29	5	4	7	3	1	¥ 1,740 ※

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

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)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M5 × 0.8	P2	SSMQ5.0K	2.5P	60	9	13	22	33	5.5	4.5	7	3	1	¥ 1,770
M5 × 0.8	P3	SSMR5.0K	2.5P	60	9	13	22	33	5.5	4.5	7	3	1	¥ 1,770 ※
M6 × 1	P2	SSMQ6.0M	2.5P	62	11	15	26	33	6	4.5	7	3	1	¥ 1,940
M6 × 1	P3	SSMR6.0M	2.5P	62	11	15	26	33	6	4.5	7	3	1	¥ 1,940 ※
M8 × 1.25	P2	SSMQ8.0N	2.5P	70	-	12	-	36	6.2	5	8	3	2	¥ 2,660
M8 × 1.25	P3	SSMR8.0N	2.5P	70	-	12	-	36	6.2	5	8	3	2	¥ 2,660 ※
M8 × 1	P2	SSMQ8.0M	2.5P	70	-	12	-	36	6.2	5	8	3	2	¥ 3,020 ※
M10 × 1.5	P2	SSMQ10.0O	2.5P	75	-	13	-	38	7	5.5	8	3	2	¥ 3,380
M10 × 1.5	P3	SSMR10.0O	2.5P	75	-	13	-	38	7	5.5	8	3	2	¥ 3,380 ※
M10 × 1.25	P2	SSMQ10.0N	2.5P	75	-	13	-	38	7	5.5	8	3	2	¥ 3,380
M10 × 1.25	P3	SSMR10.0N	2.5P	75	-	13	-	38	7	5.5	8	3	2	¥ 3,380 ※
M10 × 1	P2	SSMQ10.0M	2.5P	75	-	13	-	38	7	5.5	8	3	2	¥ 4,010 ※
M12 × 1.75	P2	SSMQ12.0P	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 4,780
M12 × 1.75	P3	SSMR12.0P	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 4,780 ※
M12 × 1.5	P2	SSMQ12.0O	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 4,780 ※
M12 × 1.5	P3	SSMR12.0O	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 4,780 ※
M12 × 1.25	P2	SSMQ12.0N	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 4,780
M12 × 1.25	P3	SSMR12.0N	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 4,780 ※
M12 × 1	P2	SSMQ12.0M	2.5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 5,630 ※
M14 × 2	P2	SSMQ14.0Q	2.5P	88	-	18	-	45	10.5	8	11	3	2	¥ 6,520
M14 × 2	P4	SSMS014Q	2.5P	88	-	18	-	45	10.5	8	11	3	2	¥ 6,520 ※
M14 × 1.5	P2	SSMQ14.0O	2.5P	88	-	14	-	45	10.5	8	11	3	2	¥ 6,520
M14 × 1.5	P4	SSMS014O	2.5P	88	-	14	-	45	10.5	8	11	3	2	¥ 6,520 ※
M14 × 1	P2	SSMQ14.0M	2.5P	88	-	14	-	45	10.5	8	11	3	2	¥ 7,580 ※
M16 × 2	P2	SSMQ16.0Q	2.5P	95	-	18	-	48	12.5	10	13	3	2	¥ 8,720
M16 × 2	P3	SSMR16.0Q	2.5P	95	-	18	-	48	12.5	10	13	3	2	¥ 8,720 ※
M16 × 2	P4	SSMS016Q	2.5P	95	-	18	-	48	12.5	10	13	3	2	¥ 8,720 ※
M16 × 1.5	P2	SSMQ16.0O	2.5P	95	-	14	-	48	12.5	10	13	3	2	¥ 8,720
M16 × 1.5	P4	SSMS016O	2.5P	95	-	14	-	48	12.5	10	13	3	2	¥ 8,720 ※
M16 × 1	P2	SSMQ16.0M	2.5P	95	-	14	-	48	12.5	10	13	3	2	¥ 10,400 ※
M18 × 2.5	P3	SSMR18.0R	2.5P	100	-	20	-	51	14	11	14	4	2	¥ 11,700
M18 × 2.5	P4	SSMS018R	2.5P	100	-	20	-	51	14	11	14	4	2	¥ 11,700 ※
M18 × 2	P3	SSMR18.0Q	2.5P	100	-	18	-	51	14	11	14	4	2	¥ 11,700 ※
M18 × 1.5	P2	SSMQ18.0O	2.5P	100	-	14	-	51	14	11	14	4	2	¥ 11,700 ※
M18 × 1.5	P4	SSMS018O	2.5P	100	-	14	-	51	14	11	14	4	2	¥ 11,700 ※
M18 × 1	P2	SSMQ18.0M	2.5P	100	-	14	-	51	14	11	14	4	2	¥ 15,200 ※
M20 × 2.5	P3	SSMR20.0R	2.5P	105	-	20	-	50	15	12	15	4	3	¥ 16,000
M20 × 2.5	P4	SSMS020R	2.5P	105	-	20	-	50	15	12	15	4	3	¥ 16,000 ※
M20 × 2	P3	SSMR20.0Q	2.5P	105	-	18	-	50	15	12	15	4	3	¥ 16,000 ※
M20 × 1.5	P3	SSMR20.0O	2.5P	105	-	14	-	50	15	12	15	4	3	¥ 16,000 ※
M20 × 1.5	P4	SSMS020O	2.5P	105	-	14	-	50	15	12	15	4	3	¥ 16,000 ※
M20 × 1	P2	SSMQ20.0M	2.5P	105	-	14	-	50	15	12	15	4	3	¥ 20,200 ※
M22 × 2.5	P3	SSMR22.0R	2.5P	115	-	20	-	55	17	13	16	4	3	¥ 20,400
M22 × 2	P3	SSMR22.0Q	2.5P	115	-	18	-	55	17	13	16	4	3	¥ 20,400 ※
M22 × 1.5	P3	SSMR22.0O	2.5P	115	-	14	-	55	17	13	16	4	3	¥ 20,400 ※
M22 × 1.5	P4	SSMS022O	2.5P	115	-	14	-	55	17	13	16	4	3	¥ 20,400 ※
M24 × 3	P3	SSMR24.0S	2.5P	120	-	25	-	55	19	15	18	4	3	¥ 25,400
M24 × 3	P4	SSMS024S	2.5P	120	-	25	-	55	19	15	18	4	3	¥ 25,400 ※
M24 × 2	P3	SSMR24.0Q	2.5P	120	-	18	-	55	19	15	18	4	3	¥ 25,400 ※
M24 × 1.5	P3	SSMR24.0O	2.5P	120	-	18	-	55	19	15	18	4	3	¥ 25,400 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-140

① Spiral Fluted Tap Series for blind hole

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

JIS

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	MSRP
M24 × 1.5	P4	SSMS024O	2.5P	120	-	18	-	55	19	15	18	4	3	¥ 25,400 ※
M27 × 3	P3	SSMR027S	2.5P	130	-	25	-	60	20	15	18	4	3	¥ 35,300 ※
M27 × 2	P3	SSMR027Q	2.5P	130	-	20	-	60	20	15	18	4	3	¥ 35,300 ※
M27 × 1.5	P3	SSMR027O	2.5P	130	-	20	-	60	20	15	18	4	3	¥ 35,300 ※
M30 × 3.5	P4	SSMS030T	2.5P	135	-	30	-	62	23	17	20	4	3	¥ 44,900 ※
M30 × 3	P3	SSMR030S	2.5P	135	-	28	-	62	23	17	20	4	3	¥ 44,900 ※
M30 × 2	P3	SSMR030Q	2.5P	135	-	20	-	62	23	17	20	4	3	¥ 44,900 ※
M30 × 1.5	P3	SSMR030O	2.5P	135	-	20	-	62	23	17	20	4	3	¥ 44,900 ※
M32 × 2	P3	SSMR032Q	2.5P	145	-	20	-	67	24	19	22	4	3	¥ 52,200 ※
M32 × 1.5	P3	SSMR032O	2.5P	145	-	20	-	67	24	19	22	4	3	¥ 52,200 ※
M33 × 3.5	P4	SSMS033T	2.5P	145	-	30	-	67	25	19	22	4	3	¥ 52,200 ※
M33 × 3	P3	SSMR033S	2.5P	145	-	28	-	67	25	19	22	4	3	¥ 52,200 ※
M33 × 2	P3	SSMR033Q	2.5P	145	-	20	-	67	25	19	22	4	3	¥ 52,200 ※
M33 × 1.5	P3	SSMR033O	2.5P	145	-	20	-	67	25	19	22	4	3	¥ 52,200 ※
M35 × 2	P3	SSMR035Q	2.5P	155	-	20	-	71	28	21	24	4	3	¥ 60,500 ※
M35 × 1.5	P3	SSMR035O	2.5P	155	-	20	-	71	28	21	24	4	3	¥ 60,500 ※
M36 × 4	P4	SSMS036U	2.5P	155	-	40	-	71	28	21	24	4	3	¥ 60,500 ※
M36 × 3	P3	SSMR036S	2.5P	155	-	30	-	71	28	21	24	4	3	¥ 60,500 ※
M36 × 2	P3	SSMR036Q	2.5P	155	-	20	-	71	28	21	24	4	3	¥ 60,500 ※
M36 × 1.5	P3	SSMR036O	2.5P	155	-	20	-	71	28	21	24	4	3	¥ 60,500 ※
M39 × 4	P4	SSMS039U	2.5P	165	-	40	-	76	30	23	26	4	3	¥ 69,400 ※
M42 × 4.5	P4	SSMS042V	2.5P	175	-	40	-	81	32	26	30	4	3	¥ 84,400 ※
M45 × 4.5	P4	SSMS045V	2.5P	180	-	45	-	83	35	26	30	4	3	¥ 97,700 ※
M48 × 5	P4	SSMS048W	2.5P	185	-	45	-	85	38	29	32	4	3	¥ 123,000 ※

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

Spiral Fluted Tap Series for blind hole

DIN

SP-BLF

Spiral Fluted Taps, Deep Hole Use



Specification



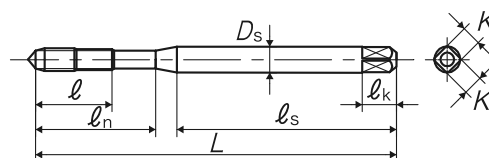
■ The SP-BLF is a spiral flute tap for cutting blind holes with a special thread shape to prevent chipping caused by the chips jamming.

Tapping Speeds depending on Materials

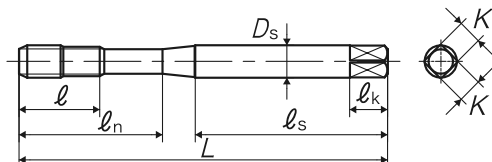
Medium carbon steels
中炭素鋼
5~10
(m/min)

High carbon steels
高炭素鋼
5~10
(m/min)

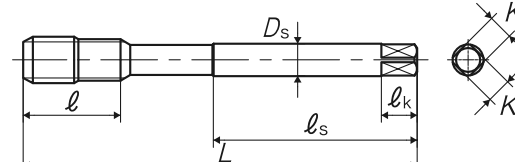
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1D

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	ISO2	SD3.0GANEBJ	2.5P	56	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2	SD4.0IANEBJ	2.5P	63	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2	SD5.0KANEBJ	2.5P	70	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2	SD6.0MANEBJ	2.5P	80	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2	SD8.0NANEBJ	2.5P	90	19	35	47	8	9	6.2	3	2
M10 × 1.5	ISO2	SD010OANEBJ	2.5P	100	23	39	52.5	10	8	11	3	2
M12 × 1.75	ISO2	SG012PANEBJ	2.5P	110	26	-	56	9	7	10	3	3

1

DIN

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
Premium Thread Mills

Dies

Center Drills
Centering Tools

Precision Machinery/
Medical Surgical Instruments

DIN

1-142

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

SP-BLF OX

Spiral Fluted Taps, Deep Hole Use, Oxidized



Specification

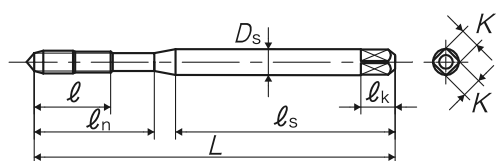


Tapping Speeds depending on Materials

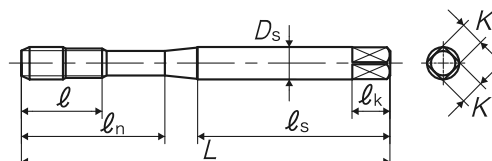
Low carbon steels 低碳素鋼	Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼
5~10 (m/min)	5~10 (m/min)	5~10 (m/min)

■ The SP-BLF OX has a special thread portion to prevent chipping caused by the chip jamming. It is a spiral flute tap for tapping blind holes. The oxidized treatment prevents welding and is applied to the surface of the taps threaded portion.

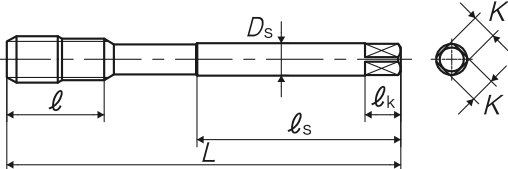
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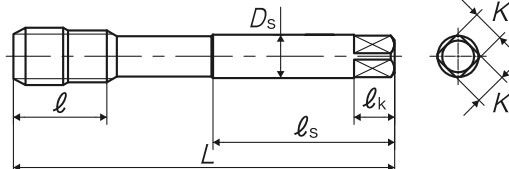
TYPE:2



TYPE:3



TYPE:4



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
For Metric Threads												
M3 × 0.5	ISO2	SD3.0GANEXJ	2.5P	56	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2	SD4.0IANEXJ	2.5P	63	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2	SD5.0KANEXJ	2.5P	70	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2	SD6.0MANEXJ	2.5P	80	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2	SD8.0NANEXJ	2.5P	90	19	35	47	8	6.2	9	3	2
M10 × 1.5	ISO2	SD010OANEXJ	2.5P	100	23	39	52.5	10	8	11	3	2
M12 × 1.75	ISO2	SG012PANEXJ	2.5P	110	26	-	56	9	7	10	3	3
M14 × 2	ISO2	SG014QANEXJ	2.5P	110	26	-	56	11	9	12	3	3
M16 × 2	ISO2	SG016QANEXJ	2.5P	110	26	-	56	12	9	12	3	3
M18 × 2.5	ISO2	SG018RANEXJ	2.5P	125	33	-	64	14	11	14	4	3
M20 × 2.5	ISO2	SG020RANEXJ	2.5P	140	33	-	71	16	12	15	4	3
M22 × 2.5	ISO2	SG022RANEXJ	2.5P	140	33	-	71	18	14.5	17	4	3
M24 × 3	ISO2	SG024SANEXJ	2.5P	160	37	-	82	18	14.5	17	4	4
M27 × 3	ISO2	SG027SANEXJ	2.5P	160	37	-	82	20	16	19	4	4
M30 × 3.5	ISO2	SG030TANEXJ	2.5P	180	44	-	92	22	18	21	4	4
M33 × 3.5	ISO2	SG033TANEXJ	2.5P	180	46	-	92	25	20	23	4	4
M36 × 4	ISO2	SG036UANEXJ	2.5P	200	52	-	102	28	22	25	4	4
M39 × 4	ISO2	SG039UANEXJ	2.5P	200	52	-	102	32	24	27	4	4

DIN

Spiral Fluted Tap Series for blind hole

DIN

SP-BLF

Spiral Fluted Taps, Deep Hole Use (Coated)



Specification

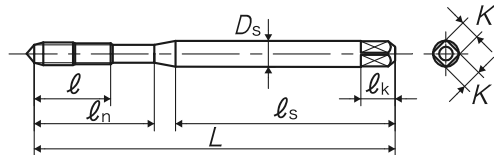


■The SP-BLF has a special thread portion to prevent chipping caused by the chip jamming. It is a spiral flute tap for tapping blind holes.

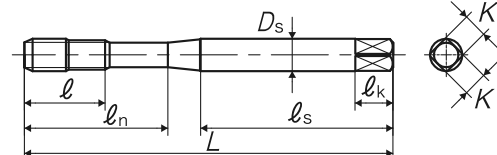
Tapping Speeds depending on Materials

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)

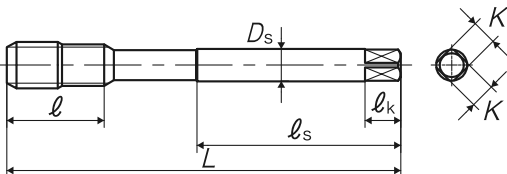
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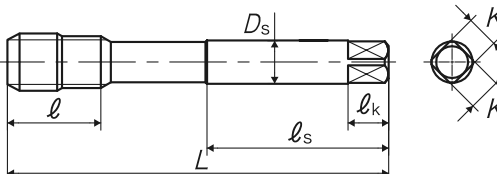
TYPE:2



TYPE:3



TYPE:4



Segment : 1D

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	ISO2	96473.0TI	2.5P	56	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2	96474.0TI	2.5P	63	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2	96475.0TI	2.5P	70	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2	96476.0TI	2.5P	80	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2	96478.0TI	2.5P	90	19	35	47	8	6.2	9	3	2
M10 × 1.5	ISO2	9647010TI	2.5P	100	23	39	52.5	10	8	11	3	2
M12 × 1.75	ISO2	9747012TI	2.5P	110	26	-	56	9	7	10	3	3
M14 × 2	ISO2	9747014TI	2.5P	110	26	-	56	11	9	12	3	3
M16 × 2	ISO2	9747016TI	2.5P	110	26	-	56	12	9	12	3	3
M18 × 2.5	ISO2	9747018TI	2.5P	125	33	-	64	14	11	14	4	3
M20 × 2.5	ISO2	9747020TI	2.5P	140	33	-	71	16	12	15	4	3
M22 × 2.5	ISO2	9747022TI	2.5P	140	33	-	71	18	14.5	17	4	3
M24 × 3	ISO2	9747024TI	2.5P	160	37	-	82	18	14.5	17	4	4

· This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

1

DIN

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
Premium Thread Mills

Dies

Center Drills
Centering Tools

Precision Machinery/
Medical Surgical Instruments

DIN

1-144

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-145

S

E-SP

Spiral Fluted Taps for Soft Structural Steels



Specification



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)

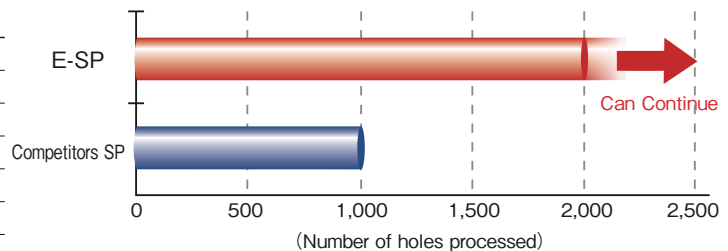
Product Features

- The E-SP is suitable for tapping relatively soft work piece materials such as mild steel (SS41, S25C, etc.).
- It produces a good internal thread with an excellent surface finish.

Tapping Data

Thread Size [M6×1]

Workpiece Material	SS400
Hole Shape	Blind hole
Bored Hole Size	φ5.0
Tapping Length	7mm
Tapping Speed	8m/min
Machinery Type	Drilling machine
Cutting Fluid	Non-water soluble cutting oil



E-SP	Competitors Spiral Fluted tap
Internal thread	Internal thread
Internal thread shape	Internal thread shape

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

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

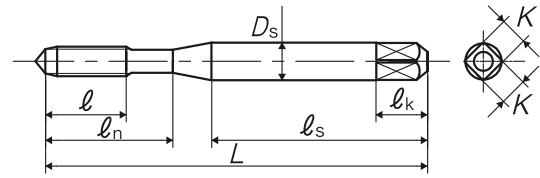
Precision Machinery/
Medical Surgical Instruments

⑫

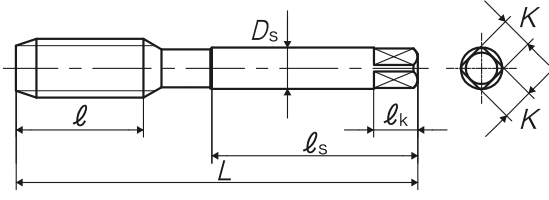
JIS

①-146

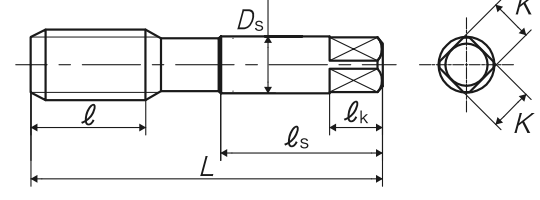
TYPE: 1



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	MSRP
For Metric Threads													
M3 × 0.5	P1	ESHMP3.0G	2.5P	46	9	14	26	4	3.2	6	2	1	¥ 1,670 ※
M3 × 0.5	P1	ESHMP3.0G-3	2.5P	46	9	14	26	4	3.2	6	3	1	¥ 1,670
M3.5 × 0.6	P1	ESHMP3.5H	2.5P	52	11	16	29	5	4	7	3	1	¥ 1,670 ※
M4 × 0.7	P2	ESHMQ4.0I	2.5P	52	11	17	29	5	4	7	3	1	¥ 1,670
M5 × 0.8	P2	ESHMQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 1,680
M6 × 1	P2	ESHMQ6.0M	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 1,850
M8 × 1.25	P2	ESHMQ8.0N	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 2,550
M10 × 1.5	P2	ESHMQ010O	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,230
M10 × 1.25	P2	ESHMQ010N	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,230 ※
M12 × 1.75	P2	ESHMQ012P	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,580
M12 × 1.5	P2	ESHMQ012O	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,580 ※
M12 × 1.25	P2	ESHMQ012N	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,580 ※
M14 × 2	P2	ESHMQ014Q	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 6,240 ※
M14 × 1.5	P2	ESHMQ014O	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 6,240 ※
M16 × 2	P2	ESHMQ016Q	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 8,340
M16 × 1.5	P2	ESHMQ016O	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 8,340 ※
M18 × 2.5	P3	ESHMR018R	2.5P	100	33	-	51	14	11	14	4	2	¥ 11,200 ※
M18 × 1.5	P2	ESHMQ018O	2.5P	100	33	-	51	14	11	14	4	2	¥ 11,200 ※
M20 × 2.5	P3	ESHMR020R	2.5P	105	33	-	50	15	12	15	4	3	¥ 15,300
M20 × 1.5	P3	ESHMR020O	2.5P	105	33	-	50	15	12	15	4	3	¥ 15,300 ※
M22 × 2.5	P3	ESHMR022R	2.5P	115	33	-	55	17	13	16	4	3	¥ 19,500 ※
M22 × 1.5	P3	ESHMR022O	2.5P	115	33	-	55	17	13	16	4	3	¥ 19,500 ※
M24 × 3	P3	ESHMR024S	2.5P	120	39	-	55	19	15	18	4	3	¥ 24,300 ※
M24 × 1.5	P3	ESHMR024O	2.5P	120	39	-	55	19	15	18	4	3	¥ 24,300 ※

※ = Specified Distribution Items. Made to order products.

 Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

S

HC+SP HC-SP

Spiral Fluted Taps for High Carbon Steels

Specification



Tapping Speeds depending on Materials

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

High carbon steels
高炭素鋼
5~10
(m/min)



• Product Name and Size.

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

Product Features

- The HC+SP/HC-SP is a spiral flute tap for high carbon steel such as S55C and is suitable for tapping of medium and high hardness materials up to 30 HRC.

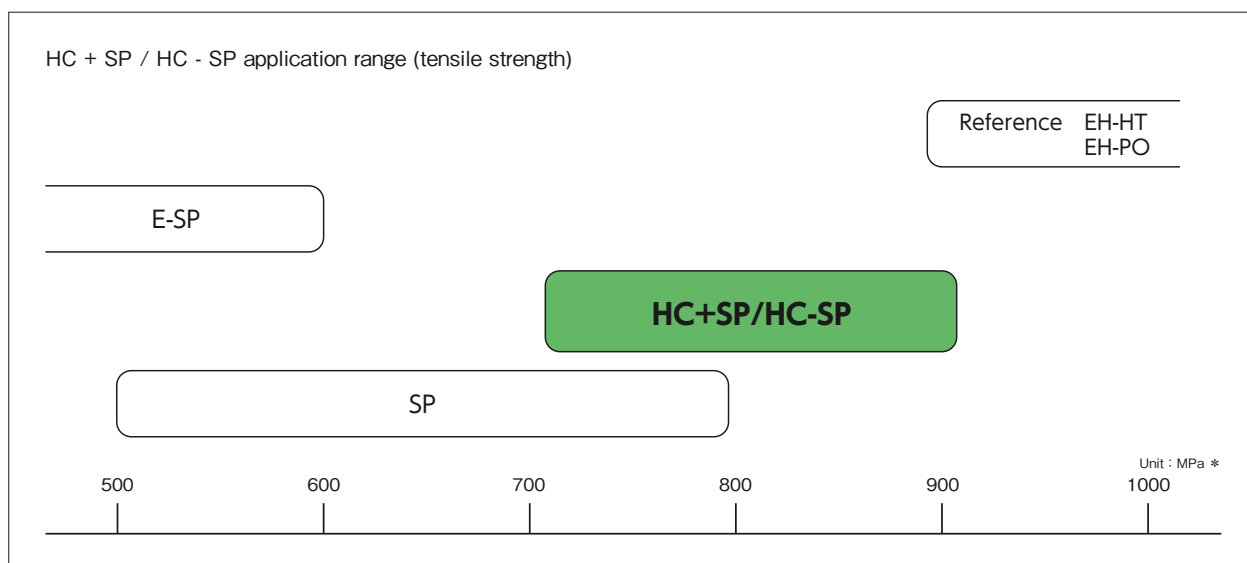
Tapping conditions

The HC+SP/HC-SP is best suited for tapping of high carbon steel, alloy tool steel and refined steel.

Workpiece Material	Cutting Speed (m/min)
S45C ~ High Carbon Steel	10 ~ 20
SKC, SKD Alloy Tool Steel	5 ~ 10
Thermal Refining Steel 25 ~ 35HRC	5 ~ 10



Product chart (tensile strength)



* 1MPa=1N/mm² ≒ 1Kgf/mm² ÷ 9.8

JIS

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

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

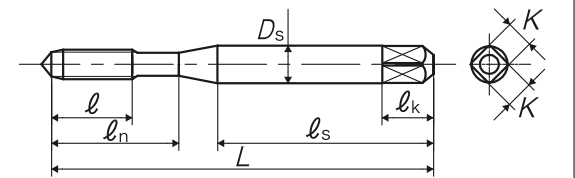
Precision Machinery/
Medical Surgical Instruments

⑫

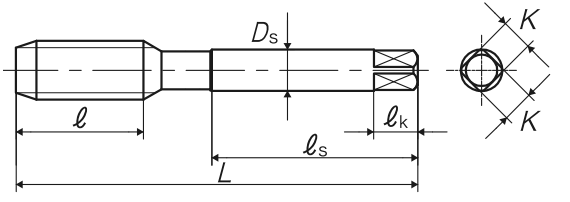
JIS

①-148

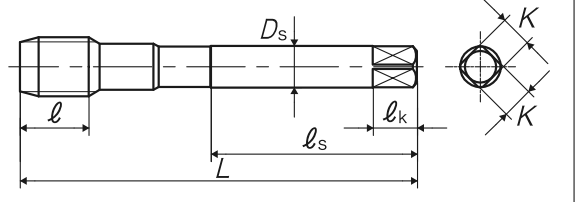
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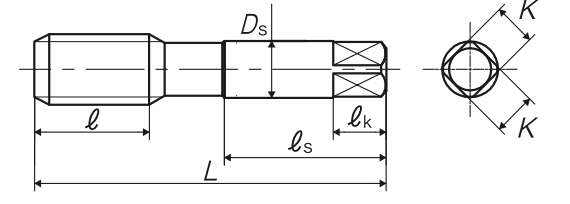
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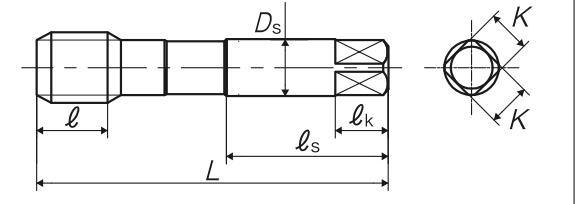
TYPE: 3



TYPE: 4



TYPE: 5



HC+SP Spiral Fluted Taps for High Carbon Steels

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	MSRP
For Metric Threads													
M3 × 0.5	P1	SCPP3.0G	2.5P	46	9	14	26	4	3.2	6	3	1	¥ 1,520
M4 × 0.7	P2	SCPQ4.0I	2.5P	52	11	17	29	5	4	7	3	1	¥ 1,520
M5 × 0.8	P2	SCPQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 1,530
M6 × 1	P2	SCPQ6.0M	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 1,680

HC-SP Spiral Fluted Taps for High Carbon Steels

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	MSRP
For Metric Threads													
M8 × 1.25	P2	SCMQ8.0N	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 2,310
M8 × 1	P2	SCMQ8.0M	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 2,620 ※
M10 × 1.5	P2	SCMQ010O	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 2,930
M10 × 1.25	P2	SCMQ010N	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 2,930 ※
M10 × 1	P2	SCMQ010M	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,480 ※
M12 × 1.75	P2	SCMQ012P	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,160
M12 × 1.5	P2	SCMQ012O	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,160 ※
M12 × 1.25	P2	SCMQ012N	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,160 ※
M12 × 1	P2	SCMQ012M	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,890 ※
M14 × 2	P2	SCMQ014Q	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 5,670 ※
M14 × 1.5	P2	SCMQ014O	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 5,670 ※
M14 × 1.25	P2	SCMQ014N	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 6,580 ※
M14 × 1	P2	SCMQ014M	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 6,580 ※
M16 × 2	P2	SCMQ016Q	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 7,580

※ = Specified Distribution Items. Made to order products.

 Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

JIS

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	MSRP
M16 × 1.5	P2	SCMQ016O	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 7,580 ※
M16 × 1	P2	SCMQ016M	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 9,030 ※
M18 × 2.5	P3	SCMR018R	2.5P	100	33	-	51	14	11	14	4	2	¥ 10,200 ※
M18 × 2	P3	SCMR018Q	2.5P	100	33	-	51	14	11	14	4	2	¥ 10,200 ※
M18 × 1.5	P2	SCMQ018O	2.5P	100	33	-	51	14	11	14	4	2	¥ 10,200 ※
M18 × 1	P2	SCMQ018M	2.5P	100	18	-	51	14	11	14	4	3	¥ 13,100 ※
M20 × 2.5	P3	SCMR020R	2.5P	105	33	-	50	15	12	15	4	4	¥ 13,800 ※
M20 × 2	P3	SCMR020Q	2.5P	105	33	-	50	15	12	15	4	4	¥ 13,800 ※
M20 × 1.5	P3	SCMR020O	2.5P	105	33	-	50	15	12	15	4	4	¥ 13,800 ※
M20 × 1	P2	SCMQ020M	2.5P	105	18	-	50	15	12	15	4	5	¥ 17,600 ※
M22 × 2.5	P3	SCMR022R	2.5P	115	33	-	55	17	13	16	4	4	¥ 17,700 ※
M22 × 2	P3	SCMR022Q	2.5P	115	33	-	55	17	13	16	4	4	¥ 17,700 ※
M22 × 1.5	P3	SCMR022O	2.5P	115	33	-	55	17	13	16	4	4	¥ 17,700 ※
M24 × 3	P3	SCMR024S	2.5P	120	39	-	55	19	15	18	4	4	¥ 22,000 ※
M24 × 2	P3	SCMR024Q	2.5P	120	39	-	55	19	15	18	4	4	¥ 22,000 ※
M24 × 1.5	P3	SCMR024O	2.5P	120	39	-	55	19	15	18	4	4	¥ 22,000 ※
M25 × 1.5	P3	SCMR025O	2.5P	125	39	-	58	19	15	18	4	4	¥ 28,500 ※
M26 × 1.5	P3	SCMR026O	2.5P	130	39	-	60	20	15	18	4	4	¥ 30,600 ※
M27 × 3	P3	SCMR027S	2.5P	130	39	-	60	20	15	18	4	4	¥ 30,600 ※
M27 × 1.5	P3	SCMR027O	2.5P	130	39	-	60	20	15	18	4	4	¥ 30,600 ※
M28 × 1.5	P3	SCMR028O	2.5P	135	46	-	62	23	17	20	4	4	¥ 39,000 ※
M30 × 3.5	P4	SCMS030T	2.5P	135	46	-	62	23	17	20	4	4	¥ 39,000 ※
M30 × 1.5	P3	SCMR030O	2.5P	135	46	-	62	23	17	20	4	4	¥ 39,000 ※
For Whitworth Threads													
1/4W20	P2	SCMQW04N	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 1,920 ※
5/16W18	P2	SCMQW05O	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 2,660 ※
3/8W16	P2	SCMQW06P	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,400 ※
1/2W12	P3	SCMRW08S	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 5,080 ※
5/8W11	P3	SCMRW10U	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 7,580 ※
3/4W10	P3	SCMRW12V	2.5P	105	33	-	50	15	12	15	4	4	¥ 13,800 ※
7/8W9	P3	SCMRW14W	2.5P	115	33	-	55	17	13	16	4	4	¥ 19,500 ※
1 W8	P3	SCMRW16X	2.5P	125	39	-	58	19	15	18	4	4	¥ 28,500 ※

① Spiral Fluted Taps (for blind hole)

② Spiral Fluted Taps (for through hole)

③ Spiral Pointed Taps (for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills Premium Thread Mills

⑩ Dies

⑪ Center Drills Centering Tools

⑫ Precision Machinery/ Medical Surgical Instruments

JIS

Spiral Fluted Tap Series for blind hole

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

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-150

HC+SP OX HC-SP OX



Spiral Fluted Taps for High Carbon Steels, Oxidized

Specification



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

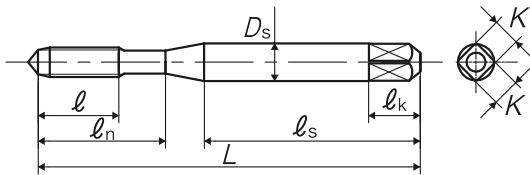
Tapping Speeds depending on Materials

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

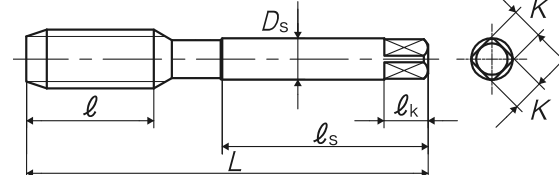
• Product Name and Size.

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

TYPE:1



TYPE:2



HC+SP OX Spiral Fluted Taps for High Carbon Steels, Oxidized

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	MSRP
For Metric Threads													
M3 × 0.5	P1	SCPP3.0GX	2.5P	46	9	14	26	4	3.2	6	3	1	¥ 1,670
M4 × 0.7	P2	SCPQ4.0IX	2.5P	52	11	17	29	5	4	7	3	1	¥ 1,670
M5 × 0.8	P2	SCPQ5.0KX	2.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 1,680
M6 × 1	P2	SCPQ6.0MX	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 1,850

HC-SP OX Spiral Fluted Taps for High Carbon Steels, Oxidized

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	MSRP
For Metric Threads													
M8 × 1.25	P2	SCMQ8.0NX	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 2,550
M10 × 1.5	P2	SCMQ010OX	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,230
M12 × 1.75	P2	SCMQ012PX	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,580
M16 × 2	P2	SCMQ016QX	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 8,340

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-151



AL+SP AL-SP

Spiral Fluted Taps for Aluminum

Specification



Tapping Speeds depending on Materials

Brass 黄銅	Brass castings 黄銅鑄物	Bronze 青銅	Wrought aluminum アルミ圧延材	Aluminum alloy castings アルミ合金鑄物	Magnesium alloy die castings マグネシウム合金鑄物	Zinc alloy castings 亜鉛合金鑄物
10~25 (m/min)	10~25 (m/min)	10~25 (m/min)	10~25 (m/min)	10~25 (m/min)	10~25 (m/min)	10~25 (m/min)

• Product Name and Size.

AL+SP	~ M6
AL-SP	M8 ~



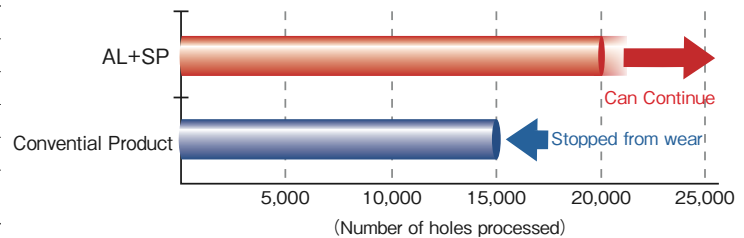
Product Features

- Stable screw tapping in light alloy castings such as aluminum die casting and aluminum casting even at a high speed range.
- Optimum design of the flute makes it possible to produce stable and clean internal threading with fewer burrs on the inner diameter that normally occur in tapping of light alloys.

Tapping Data

Thread Size [M6×1]

Material	AC4C
Bored Hole Size	φ5.0
Tapping Length	9mm (Blind hole)
Tapping Speed	20m/min
Machinery Type	Vertical type machining center
Tapping Fluid	Water soluble cutting fluid (chlorinefree 20 to 1 dilution)



AL+SP

AL+SP Internal Thread

Processing of internal thread surface

No burning to the inner diameter and the finish is good.

Conventional Product

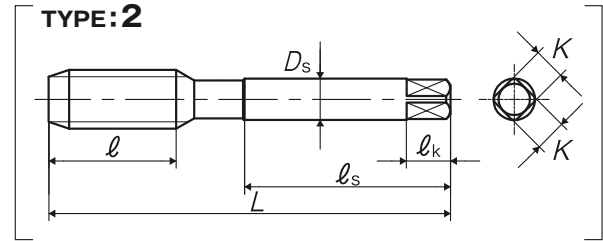
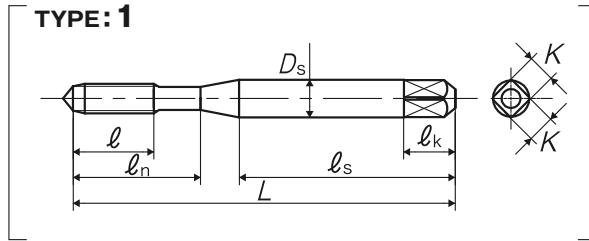
Conventional product internal thread

Processing of internal thread surface

Burning to inner diameter occurs

- AL+SP Compared to conventional products, the internal thread quality is good and the AL+SP had long tool life.

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



AL+SP Spiral Fluted Taps for Aluminum

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	MSRP
For Metric Threads													
M2 × 0.4	P2	ASHPQ2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	1	¥ 3,090
M2.3 × 0.4	P2	ASHPQ2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	1	¥ 2,820 ※
M2.5 × 0.45	P2	ASHPQ2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	1	¥ 2,360
M2.6 × 0.45	P2	ASHPQ2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	1	¥ 2,360
M3 × 0.5	P2	ASHPQ3.0G	2.5P	46	9	14	26	4	3.2	6	3	1	¥ 1,660
M3.5 × 0.6	P2	ASHPQ3.5H	2.5P	52	11	16	29	5	4	7	3	1	¥ 1,660 ※
M4 × 0.7	P3	ASHPR4.0I	2.5P	52	11	17	29	5	4	7	3	1	¥ 1,660
M5 × 0.8	P3	ASHPR5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 1,680
M6 × 1	P3	ASHPR6.0M	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 1,840

AL-SP Spiral Fluted Taps for Aluminum

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	MSRP
For Metric Threads													
M8 × 1.25	P3	ASHMR8.0N	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 2,570
M10 × 1.5	P3	ASHMR010O	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,260
M10 × 1.25	P3	ASHMR010N	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,260 ※
M10 × 1	P3	ASHMR010M	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,880 ※
M12 × 1.75	P3	ASHMR012P	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,620
M12 × 1.5	P3	ASHMR012O	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,620 ※
M12 × 1.25	P3	ASHMR012N	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,620 ※
M12 × 1	P3	ASHMR012M	2.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,450 ※
M14 × 2	P3	ASHMR014Q	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 6,300 ※
M14 × 1.5	P3	ASHMR014O	2.5P	88	26	-	45	10.5	8	11	3	2	¥ 6,300 ※
M16 × 2	P3	ASHMR016Q	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 8,430 ※
M16 × 1.5	P3	ASHMR016O	2.5P	95	26	-	48	12.5	10	13	3	2	¥ 8,430 ※

① Spiral Fluted Tap Series for blind hole

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

ANSI

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

AL-SP

Spiral Fluted Taps for Aluminum



Specification

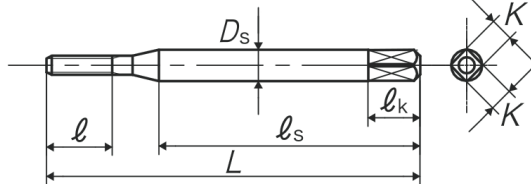


■ In aluminum die casting and aluminum casting tapping, AL-SP solves such problems as chip jamming, chip clogging, and torn threads.

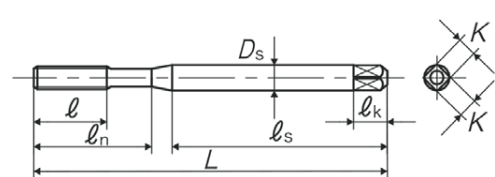
Tapping Speed depending on Materials

Brass 黄銅	Brass castings 黄銅鑄物	Bronze 青銅	Wrought aluminum アルミ圧延材	Aluminum alloy castings アルミ合金鑄物	Magnesium alloy die castings マグネシウム合金鑄物	Zinc alloy castings 亜鉛合金鑄物
10 ~ 25 (m/min)	10 ~ 25 (m/min)	10 ~ 25 (m/min)	10 ~ 25 (m/min)	10 ~ 25 (m/min)	10 ~ 25 (m/min)	10 ~ 25 (m/min)

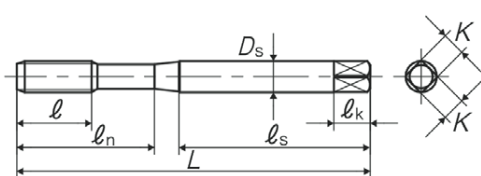
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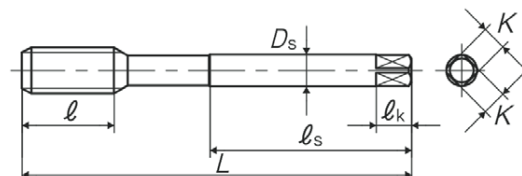
TYPE:2



TYPE:3



TYPE:4



Segment : 1D

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	ℓ_s (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	D3	386528M	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	3	2
M3.5 × 0.6	D4	386529M	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
M4 × 0.7	D4	386530M	2.5P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	3	2
M5 × 0.8	D4	386531M	2.5P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	3	2
M6 × 1	D5	386532M	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
M7 × 1	D5	386533M	2.5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	3
M8 × 1.25	D5	386535M	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 1	D5	386534M	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M10 × 1.5	D6	386537M	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 1.25	D5	386536M	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M12 × 1.75	D6	386540M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
M12 × 1.5	D5	386539M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
M12 × 1.25	D5	386538M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4

ANSI

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

1

ANSI

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

ANSI

①-154

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
For Unified Threads												
No.2-56UNC	GH2	386500M	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.4-40UNC	GH2	386501M	2.5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.5-40UNC	GH2	386502M	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	3	2
No.6-32UNC	GH3	386503M	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.8-32UNC	GH3	386504M	2.5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	3	2
No.10-24UNC	GH3	386505M	2.5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	3	2
No.10-32UNF	GH3	386506M	2.5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	3	2
1/4-20UNC	GH3	386507M	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-20UNC	GH5	386508M	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	386509M	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	386511M	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
5/16-18UNC	GH3	386512M	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-18UNC	GH5	386513M	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	386514M	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	386515M	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	386516M	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-16UNC	GH5	386517M	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	386518M	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	386519M	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
7/16-14UNC	GH3	386520M	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	4
7/16-14UNC	GH5	386521M	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	4
7/16-20UNF	GH3	386522M	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	4
7/16-20UNF	GH5	386523M	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	4
1/2-13UNC	GH3	386524M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
1/2-13UNC	GH5	386525M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	386526M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
1/2-20UNF	GH5	386527M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4

① Spiral Fluted Tap Series for blind hole

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



AL+SP AL-SP

Spiral Fluted Taps for Aluminum

Specification



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

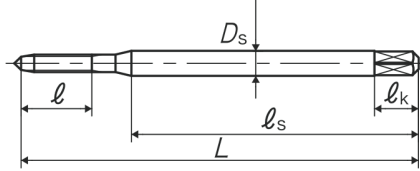
Tapping Speeds depending on Materials

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 マグネシウム合金鑄物 10~25 (m/min)
		Zinc alloy castings 亜鉛合金鑄物 10~25 (m/min)

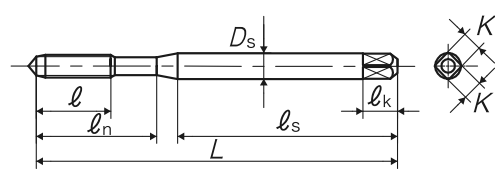
• Product Name and Size.

AL+SP	~ M6
AL-SP	M8 ~

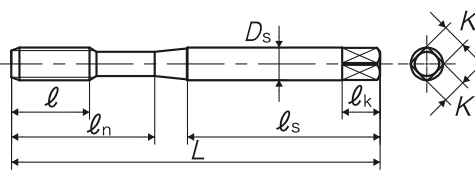
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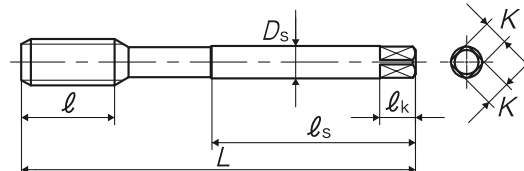
TYPE:2



TYPE:3



TYPE:4



AL+SP Spiral Fluted Taps for Aluminum

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
For Metric Threads												
M2 × 0.4	ISO2	SE2.0EALEN	2.5P	45	8	-	32	2.8	2.1	5	2	1
M2.5 × 0.45	ISO2	SE2.5FALEN	2.5P	50	8	15	33	2.8	2.1	5	2	2
M3 × 0.5	ISO2	SE3.0GALEN	2.5P	56	9	18	34	3.5	2.7	6	3	2
M4 × 0.7	ISO2	SE4.0IALEN	2.5P	63	13	21	38	4.5	3.4	6	3	2
M5 × 0.8	ISO2	SE5.0KALEN	2.5P	70	14	25	39	6	4.9	8	3	2
M6 × 1	ISO2	SE6.0MALEN	2.5P	80	15	30	45	6	4.9	8	3	2

AL-SP Spiral Fluted Taps for Aluminum

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
For Metric Threads												
M8 × 1.25	ISO2	SD8.0NALEN	2.5P	90	19	35	47	8	6.2	9	3	3
M10 × 1.5	ISO2	SD010OALEN	2.5P	100	23	39	52.5	10	8	11	3	3
M12 × 1.75	ISO2	SG012PALEN	2.5P	110	26	-	56	9	7	10	3	4
M14 × 2	ISO2	SG014QALEN	2.5P	110	26	-	56	11	9	12	3	4
M16 × 2	ISO2	SG016QALEN	2.5P	110	26	-	56	12	9	12	3	4

Think threads with
YAMAWA

• This product is different from JIS products in shape and dimensions, please be careful when using.

DIN

Spiral Fluted Tap Series for blind hole

ANSI

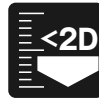
ALS-SP

Spiral Fluted Taps for Aluminum

Specification

HSS

NI
Nitride



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

Tapping Speed 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)

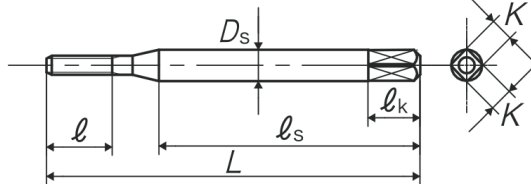
Wrought aluminum
アルミ圧延材
10~25
(m/min)

Aluminum alloy castings
アルミ合金鑄物
10~25
(m/min)

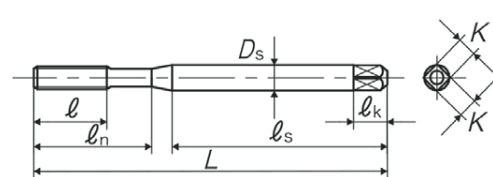
Magnesium alloy die castings
マグネシウム合金鑄物
10~25
(m/min)

Zinc alloy castings
亜鉛合金鑄物
10~25
(m/min)

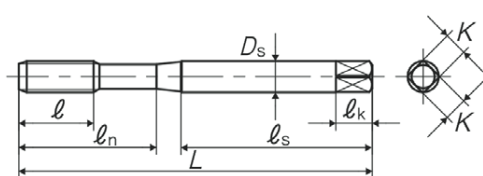
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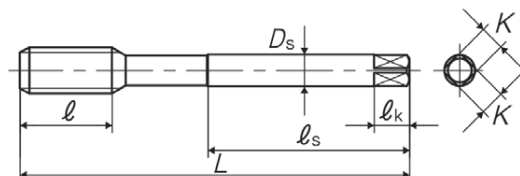
TYPE:2



TYPE:3



TYPE:4



Segment : 1D

Size	Class	Code	Chamfer	L (inch)	l (inch)	ln (inch)	ls (inch)	Ds (inch)	K (inch)	lk (inch)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	D3	386428M	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	3	2
M3.5 × 0.6	D4	386429M	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
M4 × 0.7	D4	386430M	2.5P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	3	2
M5 × 0.8	D4	386431M	2.5P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	3	2
M6 × 1	D5	386432M	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
M7 × 1	D5	386433M	2.5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	3
M8 × 1.25	D5	386435M	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 1	D5	386434M	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M10 × 1.5	D6	386437M	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 1.25	D5	386436M	2.5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M12 × 1.75	D6	386440M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
M12 × 1.5	D5	386439M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
M12 × 1.25	D5	386438M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4

• This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

1

ANSI

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

ANSI

①-156

① Spiral Fluted Tap Series for blind hole

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

ANSI

ALS-SP Spiral Fluted Taps for Aluminum

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
For Unified Threads												
No.2-56UNC	GH2	386400M	2.5P	1.772	0.314	-	1.161	0.141	0.11	0.187	3	1
No.4-40UNC	GH2	386401M	2.5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	3	2
No.5-40UNC	GH2	386402M	2.5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	3	2
No.6-32UNC	GH3	386403M	2.5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
No.8-32UNC	GH3	386404M	2.5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	3	2
No.10-24UNC	GH3	386405M	2.5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	3	2
No.10-32UNF	GH3	386406M	2.5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	3	2
1/4-20UNC	GH3	386407M	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-20UNC	GH5	386408M	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	386409M	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	386411M	2.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
5/16-18UNC	GH3	386412M	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-18UNC	GH5	386413M	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	386414M	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	386415M	2.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	386416M	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-16UNC	GH5	386417M	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	386418M	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	386419M	2.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
7/16-14UNC	GH3	386420M	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	4
7/16-14UNC	GH5	386421M	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	4
7/16-20UNF	GH3	386422M	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	4
7/16-20UNF	GH5	386423M	2.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	4
1/2-13UNC	GH3	386424M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
1/2-13UNC	GH5	386425M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	386426M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
1/2-20UNF	GH5	386427M	2.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented
Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

Spiral Fluted Tap Series for blind hole

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

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-158

AL-SP 1.5P

Spiral Fluted Taps for Aluminum 1.5P



Specification

HSS

NI
Nitride

1.5



<2D

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

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)

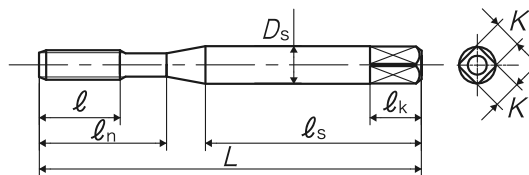
Wrought aluminum
アルミ圧延材
10~25
(m/min)

Aluminum alloy castings
アルミ合金鑄物
10~25
(m/min)

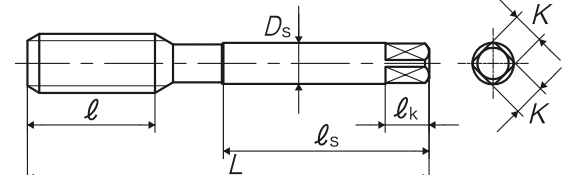
Magnesium alloy die castings
マグネシウム合金鑄物
10~25
(m/min)

Zinc alloy castings
亜鉛合金鑄物
10~25
(m/min)

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	MSRP
For Metric Threads													
M2 × 0.4	P2	SY2.0EQLNA	1.5P	42	7.2	12	27	3	2.5	5	2	1	¥ 3,090
M2.3 × 0.4	P2	SY2.3EQLNA	1.5P	42	7.2	12	27	3	2.5	5	2	1	¥ 2,820 ※
M2.5 × 0.45	P2	SY2.5FQLNA	1.5P	46	8.1	14	29	3	2.5	5	2	1	¥ 2,360
M2.6 × 0.45	P2	SY2.6FQLNA	1.5P	46	8.1	14	29	3	2.5	5	2	1	¥ 2,360
M3 × 0.5	P2	SY3.0GQLNA	1.5P	46	9	14	26	4	3.2	6	3	1	¥ 1,660
M3.5 × 0.6	P2	SY3.5HQLNA	1.5P	52	11	16	29	5	4	7	3	1	¥ 1,660 ※
M4 × 0.7	P3	SY4.0IRLENA	1.5P	52	11	17	29	5	4	7	3	1	¥ 1,660
M5 × 0.8	P3	SY5.0KRLENA	1.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 1,680
M6 × 1	P3	SY6.0MRLENA	1.5P	62	15	26	33	6	4.5	7	3	1	¥ 1,840
M8 × 1.25	P3	SY8.0NRLENA	1.5P	70	19	-	36	6.2	5	8	3	2	¥ 2,570
M10 × 1.5	P3	SY010ORLENA	1.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,260
M10 × 1.25	P3	SY010NRLENA	1.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,260 ※
M10 × 1	P3	SY010MRLENA	1.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,880 ※
M12 × 1.75	P3	SY012PRLENA	1.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,620
M12 × 1.5	P3	SY012ORLENA	1.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,620 ※
M12 × 1.25	P3	SY012NRLENA	1.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 4,620 ※
M12 × 1	P3	SY012MRLENA	1.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,450 ※
M14 × 2	P3	SY014QRLENA	1.5P	88	26	-	45	10.5	8	11	3	2	¥ 6,300 ※
M14 × 1.5	P3	SY014ORLENA	1.5P	88	26	-	45	10.5	8	11	3	2	¥ 6,300 ※
M16 × 2	P3	SY016QRLENA	1.5P	95	26	-	48	12.5	10	13	3	2	¥ 8,430 ※
M16 × 1.5	P3	SY016ORLENA	1.5P	95	26	-	48	12.5	10	13	3	2	¥ 8,430 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-159

S

LO-SP

Low Spiral Fluted Taps



Specification



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)

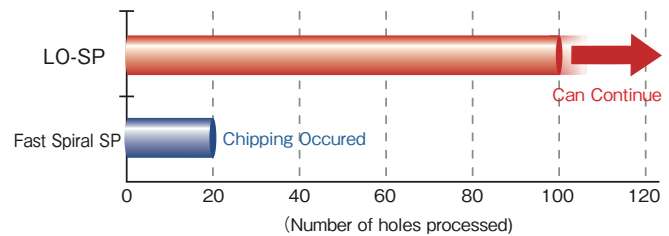
Product Features

- The chips are cut short in length and ejected smoothly due to the effect of a low spiral flute.
- The LO-SP is effective for thread processing and horizontal machining of tempered materials such as high carbon steel and alloy tool steel.

Tapping Data

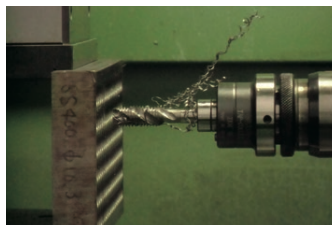
Tapping conditions [M12×1.75]

Work Piece Material	SS400
Bored Hole Size	φ10.3
Tapping Length	25mm (Blind hole)
Tapping Speed	10m/min
Machinery Type	CNC horizontal machining center (synchronous)
Holder	Fixed
Tapping Fluid	Water soluble cutting fluid



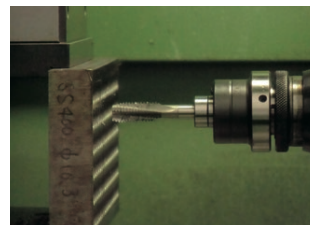
〈Chip evacuation capability〉

High spiral tap.



When horizontal tapping, the chips tend to hang down due to gravity. These chips wrap around the taps and the holders.

LO-SP

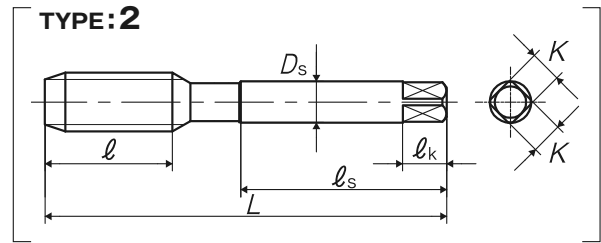
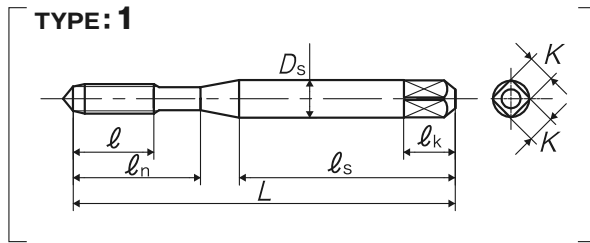


By cutting chips small, the chip problem is eliminated.

Chips



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



Segment : 1C

Size	Class	Code	Chamfer	Helix angle	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads														
M3 × 0.5	P1	LSHMP3.0G8	2.5P	8°	46	9	14	26	4	3.2	6	3	1	¥ 1,520 ※
M3 × 0.5	P1	LSHMP3.0G15	2.5P	15°	46	9	14	26	4	3.2	6	3	1	¥ 1,520 ※
M3 × 0.5	P1	LSHMP3.0G20	2.5P	20°	46	9	14	26	4	3.2	6	3	1	¥ 1,520 ※
M4 × 0.7	P2	LSHMQ4.0I8	2.5P	8°	52	11	17	29	5	4	7	3	1	¥ 1,520 ※
M4 × 0.7	P2	LSHMQ4.0I15	2.5P	15°	52	11	17	29	5	4	7	3	1	¥ 1,520 ※
M4 × 0.7	P2	LSHMQ4.0I20	2.5P	20°	52	11	17	29	5	4	7	3	1	¥ 1,520 ※
M5 × 0.8	P2	LSHMQ5.0K8	2.5P	8°	60	13	22	33	5.5	4.5	7	3	1	¥ 1,530 ※
M5 × 0.8	P2	LSHMQ5.0K15	2.5P	15°	60	13	22	33	5.5	4.5	7	3	1	¥ 1,530 ※
M5 × 0.8	P2	LSHMQ5.0K20	2.5P	20°	60	13	22	33	5.5	4.5	7	3	1	¥ 1,530 ※
M6 × 1	P2	LSHMQ6.0M8	2.5P	8°	62	15	26	33	6	4.5	7	3	1	¥ 1,680 ※
M6 × 1	P2	LSHMQ6.0M15	2.5P	15°	62	15	26	33	6	4.5	7	3	1	¥ 1,680 ※
M6 × 1	P2	LSHMQ6.0M20	2.5P	20°	62	15	26	33	6	4.5	7	3	1	¥ 1,680 ※
M8 × 1.25	P2	LSHMQ8.0N8	2.5P	8°	70	19	-	36	6.2	5	8	3	2	¥ 2,310 ※
M8 × 1.25	P2	LSHMQ8.0N15	2.5P	15°	70	19	-	36	6.2	5	8	3	2	¥ 2,310 ※
M8 × 1.25	P2	LSHMQ8.0N20	2.5P	20°	70	19	-	36	6.2	5	8	3	2	¥ 2,310 ※
M10 × 1.5	P2	LSHMQ010O8	2.5P	8°	75	23	-	38	7	5.5	8	3	2	¥ 2,930 ※
M10 × 1.5	P2	LSHMQ010O15	2.5P	15°	75	23	-	38	7	5.5	8	3	2	¥ 2,930 ※
M10 × 1.5	P2	LSHMQ010O20	2.5P	20°	75	23	-	38	7	5.5	8	3	2	¥ 2,930 ※
M12 × 1.75	P2	LSHMQ012P8	2.5P	8°	82	26	-	42	8.5	6.5	9	3	2	¥ 4,160 ※
M12 × 1.75	P2	LSHMQ012P15	2.5P	15°	82	26	-	42	8.5	6.5	9	3	2	¥ 4,160 ※
M12 × 1.75	P2	LSHMQ012P20	2.5P	20°	82	26	-	42	8.5	6.5	9	3	2	¥ 4,160 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

1

JIS

Spiral Fluted Taps
(for blind hole) ①

Spiral Fluted Taps
(for through hole) ②

Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫

JIS

①-160

① Spiral Fluted Tap Series for blind hole

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

ANSI

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

LO-SP

Low Spiral Fluted Taps for Alloy Steels



Specification

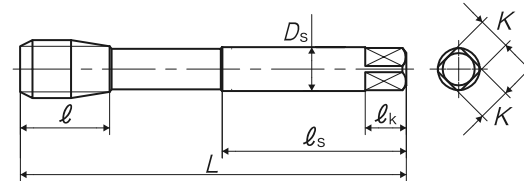


Tapping Speed depending on Materials

High carbon steels 高炭素鋼	Alloy steels 合金鋼
5~10 (m/min)	5~10 (m/min)

■ Using the LO-SP, the chips are divided and discharged smoothly due to the low helix spiral flute. The LO-SP is effective for thread processing of high carbon steels, alloy steels etc. and horizontal machining.

TYPE: 1



Segment : 1C

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
For Unified Threads												
1 -8UNC	2BX	SSU16XYEEXHT	2.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	4	1
1 1/8-8UN	2BX	SSU18XYEEXHT	2.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	1
1 1/4-8UN	2BX	SSU20XYEEXHT	2.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	1
1 3/8-8UN	2BX	SSU22XYEEXHT	2.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	1
1 1/2-8UN	2BX	SSU24XYEEXHT	2.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	1

ANSI

①-161

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

Spiral Fluted Tap Series for blind hole

DIN

LO-SP

Low Spiral Fluted Taps



Specification

HSS



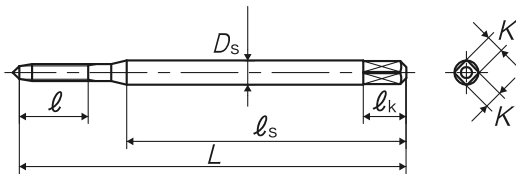
■Spiral flutes with low helix can break down chips and can eject them smoothly. Suitable for thermal refined high carbon steels and alloy tool steels. Effective in horizontal tapping.

Tapping Speeds depending on Materials

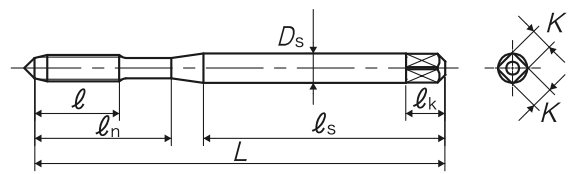
Medium carbon steels
中炭素鋼
5~10
(m/min)

High carbon steels
高炭素鋼
5~10
(m/min)

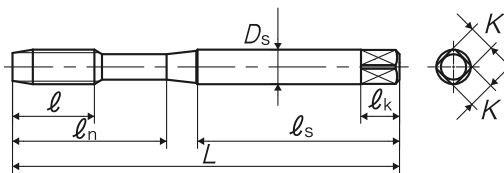
TYPE:1



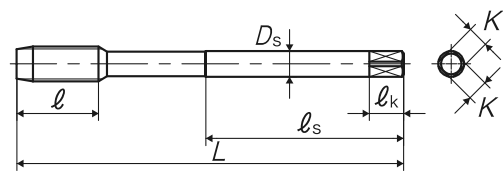
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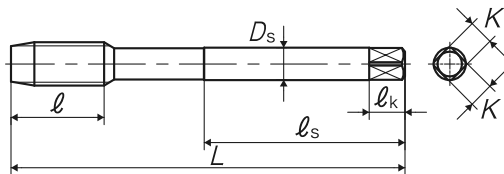
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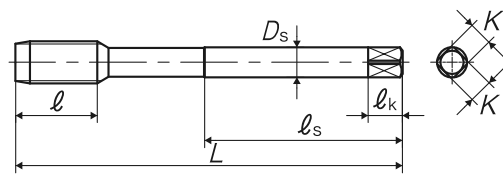
TYPE:4



TYPE:5



TYPE:6



Segment: 1D (G=1H)

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	TYPE
For Metric Threads												
M2 × 0.4	ISO2	SD2.0EANEHBH	3.5P	45	8	-	32	2.8	2.1	5	2	1
M2.3 × 0.4	ISO2	SD2.3EANEHBH	3.5P	45	9	-	32	2.8	2.1	5	2	1
M2.5 × 0.45	ISO2	SD2.5FANEHBH	3.5P	50	8	15	33	2.8	2.1	5	2	2
M2.6 × 0.45	ISO2	SD2.6FANEHBH	3.5P	50	8	15	33	2.8	2.1	5	2	2
M3 × 0.5	ISO2	SD3.0GANEHBH	3.5P	56	9	18	34	3.5	2.7	6	2	2
M3.5 × 0.6	ISO2	SD3.5HANEHBH	3.5P	56	11	20	32	4	3	6	3	2
M4 × 0.7	ISO2	SD4.0IANEBH	3.5P	63	13	21	38	4.5	3.4	6	3	2
M5 × 0.8	ISO2	SD5.0KANEBH	3.5P	70	14	25	39	6	4.9	8	3	2
M6 × 1	ISO2	SD6.0MANEBH	3.5P	80	15	30	45	6	4.9	8	3	2
M8 × 1.25	ISO2	SD8.0NANEHBH	3.5P	90	19	35	47	8	6.2	9	3	3

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

1

DIN

Spiral Fluted Taps
(for blind hole)
①

Spiral Fluted Taps
(for through hole)
②

Spiral Pointed Taps
(for through hole)
③

Hand Taps
④

Cemented
Carbide Taps
⑤

Roll Taps
⑥

Special Thread Taps
Simple Inspection Tools
⑦

Pipe Taps
⑧

Thread Mills
Premium Thread Mills
⑨

Dies
⑩

Center Drills
Centering Tools
⑪

Precision Machinery/
Medical Surgical Instruments
⑫

DIN

①-162

① Spiral Fluted Tap Series for blind hole

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

DIN

LO-SP Low 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
M8 × 1	ISO2	SM8.0MANEBH	3.5P	90	19	-	46	6	4.9	8	3	4
M10 × 1.5	ISO2	SD010OANEBH	3.5P	100	23	39	52.5	10	8	11	3	3
M10 × 1.25	ISO2	SM010NANEBH	3.5P	100	23	-	51	7	5.5	8	3	4
M10 × 1	ISO2	SM010MANEBH	3.5P	90	19	-	46	7	5.5	8	3	4
M12 × 1.75	ISO2	SG012PANEBH	3.5P	110	26	-	56	9	7	10	3	5
M12 × 1.5	ISO2	SM012OANEBH	3.5P	100	21	-	51	9	7	10	3	4
M12 × 1.25	ISO2	SM012NANEBH	3.5P	100	21	-	51	9	7	10	3	4
M12 × 1	ISO2	SM012MANEBH	3.5P	100	21	-	51	9	7	10	3	4
M14 × 2	ISO2	SG014QANEBH	3.5P	110	26	-	56	11	9	12	3	5
M14 × 1.5	ISO2	SM014OANEBH	3.5P	100	21	-	51	11	9	12	3	4
M16 × 2	ISO2	SG016QANEBH	3.5P	110	26	-	56	12	9	12	3	5
M16 × 1.5	ISO2	SM016OANEBH	3.5P	100	21	-	51	12	9	12	3	4
M16 × 1	ISO2	SM016MANEBH	3.5P	100	21	-	51	12	9	12	3	4
M18 × 1.5	ISO2	SM018OANEBH	3.5P	110	24	-	56	14	11	14	4	4
M20 × 2.5	ISO2	SG020RANEBH	3.5P	140	33	-	71	16	12	15	4	5
M24 × 3	ISO2	SG024SANEBH	3.5P	160	37	-	82	18	14.5	17	4	5
M24 × 1.5	ISO2	SM024OANEBH	3.5P	140	27	-	71	18	14.5	17	4	4
M30 × 3.5	ISO2	SG030TANEBH	3.5P	180	44	-	92	22	18	21	4	5
For G Threads												
G 1/8-28	-	SVG0020NEBH	3.5P	90	19	-	46	7	5.5	8	3	6
G 1/4-19	-	SVG0040NEBH	3.5P	100	21	-	51	11	9	12	3	6
G 3/8-19	-	SVG0060NEBH	3.5P	100	21	-	51	12	9	12	3	6
G 1/2-14	-	SVG0080NEBH	3.5P	125	24	-	64	16	12	15	4	6
G 1 -11	-	SVG0160NEBH	3.5P	160	29	-	82	25	20	23	4	6

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

Spiral Fluted Tap Series for blind hole

DIN

LO-SP OX

Low Spiral Fluted Taps, Oxidized



Specification

HSS

OX

Oxide



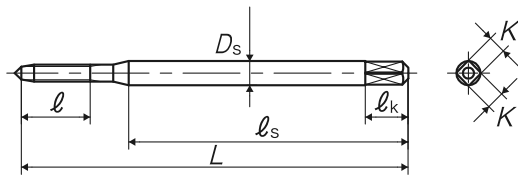
■Spiral flutes with low helix can break down chips and can eject them smoothly. Suitable for thermal refined high carbon steels and alloy tool steels. Effective in horizontal tapping.

Tapping Speeds depending on Materials

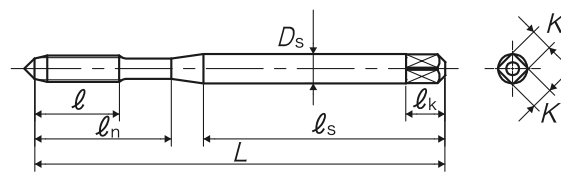
Medium carbon steels
中炭素鋼
5~10
(m/min)

High carbon steels
高炭素鋼
5~10
(m/min)

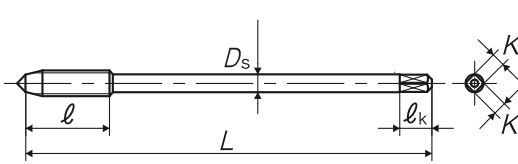
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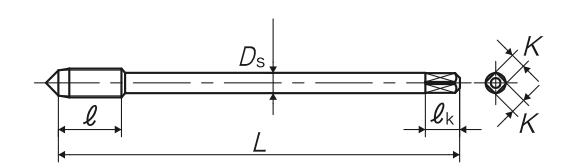
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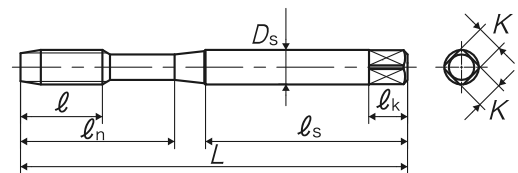
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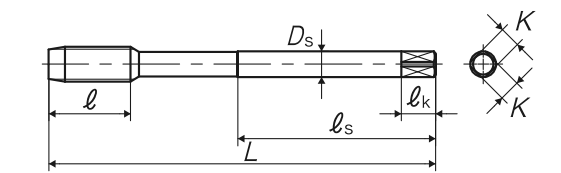
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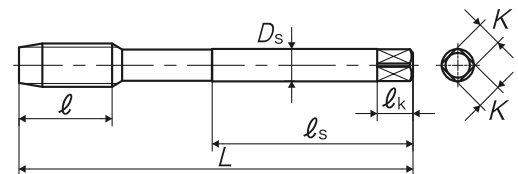
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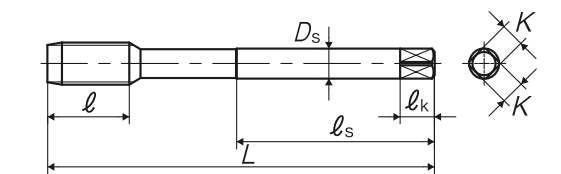
TYPE:6



TYPE:7



TYPE:8



1

DIN

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
Premium Thread Mills

Dies

Center Drills
Centering Tools

Precision Machinery/
Medical Surgical Instruments

DIN

1-164

① Spiral Fluted Tap Series for blind hole

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

DIN

LO-SP OX Low Spiral Fluted Taps, Oxidized

Segment : 1D (G=1H)

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
For Metric Threads												
M2 × 0.4	ISO2	SD2.0EANEXH	3.5P	45	8	-	32	2.8	2.1	5	2	1
M2.5 × 0.45	ISO2	SD2.5FANEXH	3.5P	50	8	15	33	2.8	2.1	5	2	2
M2.6 × 0.45	ISO2	SD2.6FANEXH	3.5P	50	8	15	33	2.8	2.1	5	2	2
M3 × 0.5	ISO2	SD3.0GANEXH	3.5P	56	9	18	34	3.5	2.7	6	2	2
M3 × 0.5	ISO3	SD3.0GMNEXH	3.5P	56	9	18	34	3.5	2.7	6	2	2
M4 × 0.7	ISO2	SD4.0IANEXH	3.5P	63	13	21	38	4.5	3.4	6	3	2
M4 × 0.7	ISO2	SG4.0IANEXH	3.5P	63	13	-	-	2.8	2.1	5	3	3
M4 × 0.7	ISO3	SD4.0IMNEXH	3.5P	63	13	21	38	4.5	3.4	6	3	2
M5 × 0.8	ISO2	SD5.0KANEXH	3.5P	70	14	25	39	6	4.9	8	3	2
M5 × 0.8	ISO2	SG5.0KANEXH	3.5P	70	14	-	-	3.5	2.7	6	3	3
M5 × 0.8	ISO3	SD5.0KMNEXH	3.5P	70	14	25	39	6	4.9	8	3	2
M5 × 0.5	ISO2	SM5.0GANEXH	3.5P	70	11	-	-	3.5	2.7	6	3	4
M6 × 1	ISO2	SD6.0MANEXH	3.5P	80	15	30	45	6	4.9	8	3	2
M6 × 1	ISO2	SG6.0MANEXH	3.5P	80	15	-	-	4.5	3.4	6	3	3
M6 × 1	ISO3	SD6.0MMNEXH	3.5P	80	15	30	45	6	4.9	8	3	2
M6 × 0.75	ISO2	SM6.0JANEXH	3.5P	80	13	-	-	4.5	3.4	6	3	4
M7 × 1	ISO2	SD7.0MANEXH	3.5P	80	15	30	45	7	5.5	8	3	5
M8 × 1.25	ISO2	SD8.0NANEXH	3.5P	90	19	35	47	8	6.2	9	3	5
M8 × 1.25	ISO2	SG8.0NANEXH	3.5P	90	19	-	46	6	4.9	8	3	6
M8 × 1.25	ISO3	SD8.0NMNEXH	3.5P	90	19	35	47	8	6.2	9	3	5
M8 × 1	ISO2	SM8.0MANEXH	3.5P	90	19	-	46	6	4.9	8	3	7
M8 × 0.75	ISO2	SM8.0JANEXH	3.5P	80	19	-	41	6	4.9	8	3	7
M10 × 1.5	ISO2	SD010OANEXH	3.5P	100	23	39	52.5	10	8	11	3	5
M10 × 1.5	ISO2	SG010OANEXH	3.5P	100	23	-	51	7	5.5	8	3	6
M10 × 1.5	ISO3	SD010OMNEXH	3.5P	100	23	39	52.5	10	8	11	3	5
M10 × 1.25	ISO2	SM010NANEXH	3.5P	100	23	-	51	7	5.5	8	3	7
M10 × 1	ISO2	SM010MANEXH	3.5P	90	19	-	46	7	5.5	8	3	7
M10 × 0.75	ISO2	SM010JANEXH	3.5P	90	19	-	46	7	5.5	8	3	7
M12 × 1.75	ISO2	SG012PANEXH	3.5P	110	26	-	56	9	7	10	3	6
M12 × 1.75	ISO3	SG012PMNEXH	3.5P	110	26	-	56	9	7	10	3	6
M12 × 1.5	ISO2	SM012OANEXH	3.5P	100	21	-	51	9	7	10	3	7
M12 × 1.25	ISO2	SM012NANEXH	3.5P	100	21	-	51	9	7	10	3	7
M12 × 1	ISO2	SM012MANEXH	3.5P	100	21	-	51	9	7	10	3	7
M14 × 2	ISO2	SG014QANEXH	3.5P	110	26	-	56	11	9	12	3	6
M14 × 2	ISO3	SG014QMNEXH	3.5P	110	26	-	56	11	9	12	3	6
M14 × 1.5	ISO2	SM014OANEXH	3.5P	100	21	-	51	11	9	12	3	7
M14 × 1	ISO2	SM014MANEXH	3.5P	100	21	-	51	11	9	12	3	7
M16 × 2	ISO2	SG016QANEXH	3.5P	110	26	-	56	12	9	12	3	6
M16 × 2	ISO3	SG016QMNEXH	3.5P	110	26	-	56	12	9	12	3	6
M16 × 1.5	ISO2	SM016OANEXH	3.5P	100	21	-	51	12	9	12	3	7
M16 × 1	ISO2	SM016MANEXH	3.5P	100	21	-	51	12	9	12	3	7
M18 × 2.5	ISO2	SG018RANEXH	3.5P	125	33	-	64	14	11	14	4	6
M18 × 1.5	ISO2	SM018OANEXH	3.5P	110	24	-	56	14	11	14	4	7
M20 × 2.5	ISO2	SG020RANEXH	3.5P	140	33	-	71	16	12	15	4	6
M20 × 2	ISO2	SM020QANEXH	3.5P	140	33	-	71	16	12	15	4	7
M20 × 1.5	ISO2	SM020OANEXH	3.5P	125	24	-	64	16	12	15	4	7
M20 × 1	ISO2	SM020MANEXH	3.5P	125	24	-	64	16	12	15	4	7
M22 × 2.5	ISO2	SG022RANEXH	3.5P	140	33	-	71	18	14.5	17	4	6
M22 × 1.5	ISO2	SM022OANEXH	3.5P	125	24	-	64	18	14.5	17	4	7

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented
Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

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

LO-SP OX Low Spiral Fluted Taps, Oxidized

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M22 × 1	ISO2	SM022MANEXH	3.5P	125	24	-	64	18	14.5	17	4	7
M24 × 3	ISO2	SG024SANEXH	3.5P	160	37	-	82	18	14.5	17	4	6
M24 × 2	ISO2	SM024QANEXH	3.5P	140	27	-	71	18	14.5	17	4	7
M24 × 1.5	ISO2	SM024OANEXH	3.5P	140	27	-	71	18	14.5	17	4	7
M24 × 1	ISO2	SM024MANEXH	3.5P	140	27	-	71	18	14.5	17	4	7
M25 × 1.5	ISO2	SM025OANEXH	3.5P	140	27	-	71	18	14.5	17	4	7
M27 × 3	ISO2	SG027SANEXH	3.5P	160	37	-	82	20	16	19	4	6
M27 × 2	ISO2	SM027QANEXH	3.5P	140	27	-	71	20	16	19	4	7
M28 × 1.5	ISO2	SM028OANEXH	3.5P	140	27	-	71	20	16	19	4	7
M28 × 1	ISO2	SM028MANEXH	3.5P	140	27	-	71	20	16	19	4	7
M30 × 3.5	ISO2	SG030TANEXH	3.5P	180	44	-	92	22	18	21	4	6
M30 × 2	ISO2	SM030QANEXH	3.5P	150	27	-	77	22	18	21	4	7
M30 × 1.5	ISO2	SM030OANEXH	3.5P	150	27	-	77	22	18	21	4	7
For G Threads												
G 1/8-28	-	SVG0020NEXH	3.5P	90	19	-	46	7	5.5	8	3	8
G 1/4-19	-	SVG0040NEXH	3.5P	100	21	-	51	11	9	12	3	8
G 3/8-19	-	SVG0060NEXH	3.5P	100	21	-	51	12	9	12	3	8
G 1/2-14	-	SVG0080NEXH	3.5P	125	24	-	64	16	12	15	4	8
G 3/4-14	-	SVG0120NEXH	3.5P	140	27	-	71	20	16	19	4	8
G 1 -11	-	SVG0160NEXH	3.5P	160	29	-	82	25	20	23	4	8

1

DIN

Spiral Fluted Taps
(for blind hole) ①Spiral Fluted Taps
(for through hole) ②Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪Precision Machinery/
Medical Surgical Instruments ⑫

DIN

①-166

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

LS-LO-SP

Long Shank Low Spiral Fluted Taps



Specification



Helix angle 8°

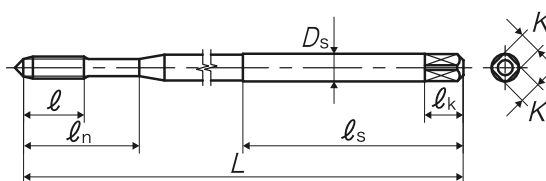
■ Spiral flutes with low helix can break down chips and can eject them smoothly. LS-LO-SP is the long shank spiral fluted tap suitable for thermal refined high carbon steels and alloy tool steels. Effective in horizontal tapping.

Tapping Speeds depending on Materials

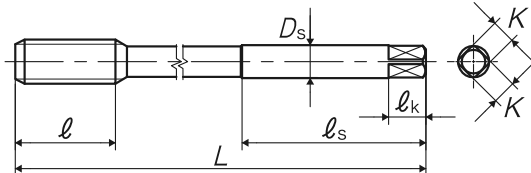
Medium carbon steels
中炭素鋼
5~10
(m/min)

High carbon steels
高炭素鋼
5~10
(m/min)

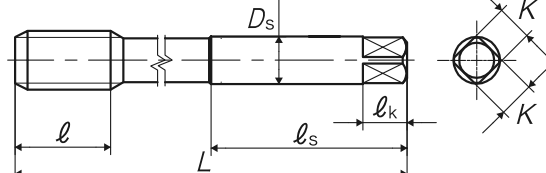
TYPE: 1



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	MSRP
For Metric Threads													
M6 × 1	P2	LSHFQ6.0ML10	2.5P	100	15	30	40	6	4.5	7	3	1	¥ 2,970 ※
M8 × 1.25	P2	LSHMQ8.0NL10	2.5P	100	19	-	50	6.2	5	8	3	2	¥ 3,770 ※
M8 × 1.25	P2	LSHMQ8.0NL15	2.5P	150	19	-	50	6.2	5	8	3	2	¥ 6,420 ※
M10 × 1.5	P2	LSHMQ10.0L15	2.5P	150	23	-	50	7	5.5	8	3	2	¥ 7,470 ※
M10 × 1.25	P2	LSHMQ10.0NL15	2.5P	150	23	-	50	7	5.5	8	3	2	¥ 7,470 ※
M12 × 1.75	P2	LSHMQ12.0PL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	¥ 9,350 ※
M12 × 1.5	P2	LSHMQ12.0L15	2.5P	150	26	-	50	8.5	6.5	9	3	2	¥ 9,350 ※
M12 × 1.25	P2	LSHMQ12.0NL15	2.5P	150	26	-	50	8.5	6.5	9	3	2	¥ 9,350 ※
M14 × 2	P2	LSHMQ14.0QL15	2.5P	150	26	-	60	10.5	8	11	3	2	¥ 11,800 ※
M14 × 1.5	P2	LSHMQ14.0L15	2.5P	150	26	-	60	10.5	8	11	3	2	¥ 11,800 ※
M16 × 2	P2	LSHMQ16.0QL15	2.5P	150	26	-	60	12.5	10	13	3	2	¥ 12,800 ※
M16 × 2	P2	LSHMQ16.0QL20	2.5P	200	26	-	60	12.5	10	13	3	2	¥ 16,800 ※
M16 × 1.5	P2	LSHMQ16.0L15	2.5P	150	26	-	60	12.5	10	13	3	2	¥ 12,800 ※
M16 × 1.5	P2	LSHMQ16.0L20	2.5P	200	26	-	60	12.5	10	13	3	2	¥ 16,800 ※
M18 × 2.5	P3	LSHMR018RL20	2.5P	200	33	-	70	14	11	14	4	2	¥ 21,900 ※
M18 × 1.5	P2	LSHMQ18.0L20	2.5P	200	33	-	70	14	11	14	4	2	¥ 21,900 ※
M20 × 2.5	P3	LSHMR020RL20	2.5P	200	33	-	70	15	12	15	4	3	¥ 27,900 ※
M20 × 1.5	P3	LSHMR020OL20	2.5P	200	33	-	70	15	12	15	4	3	¥ 27,900 ※
M22 × 2.5	P3	LSHMR022RL20	2.5P	200	33	-	70	17	13	16	4	3	¥ 30,900 ※
M22 × 1.5	P3	LSHMR022OL20	2.5P	200	33	-	70	17	13	16	4	3	¥ 30,900 ※
M24 × 3	P3	LSHMR024SL20	2.5P	200	39	-	80	19	15	18	4	3	¥ 34,700 ※
M24 × 1.5	P3	LSHMR024OL20	2.5P	200	39	-	80	19	15	18	4	3	¥ 34,700 ※

JIS

M E M O

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-169

S

ZET-B

Spiral Fluted Taps for Titanium Alloys



Specification



Tapping Speeds depending on Materials

Titanium alloys
チタン合金
5~10
(m/min)

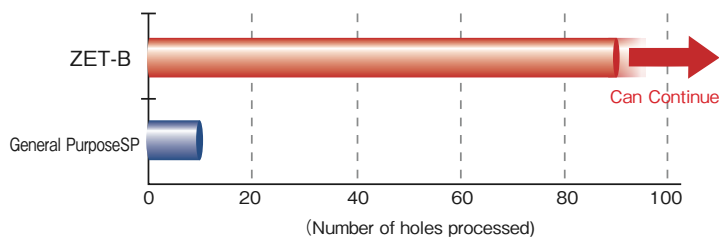
Product Features

- The tap is produced from a high grade powder high speed steel that is excellent for heat resistance and wear resistance.
- The cutting edge geometry helps prevent material shrinkage. The the spiral flute design helps pull the chips ou of the hole to allow the cutting heat to be carried out.
- Appropriate flute shape for titanium alloy is utilized and the ejection of the chips is smooth.
- A nitride surface treatment is performed for added wear resistance.
- Considering the shrinkage of the internal screw thread, the tap is produced to a moderate oversize condition.

Tapping Data

Tapping Conditions [M6×1]

Work Piece Material	Ti-6Al-4V
Bored Hole Size	φ5.0
Tapping Length	12mm
Tapping Speed	8m/min
Machinery Type	CNC tapping center
Tapping Fluid	Water soluble cutting fluid



Characteristics of titanium alloy

It is mainly composed of titanium that has a high strength and is light weight. It has excellent heat resistance. There are various types of titanium alloys such as Ti - 5Al - 2.5Sn, Ti - 5Ta, and the most popular Ti - 6Al - 4V which is commonly used due to its good characteristics.

Examples of problems in tapping

- Titanium alloys have high temperature strength and the thermal diffusion is small, so abrupt abrasion occurs on the tap.
- The spring back on internal screw threads may cause diameters to shrink and the tap may be crimped causing breakage.
- Chip welding occurs easily on the cutting chamfer of the tap and the threads flank surface. The finished thread surface of the internal screw thread also becomes rough and coarse.

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	D _s	K	ℓ _k

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

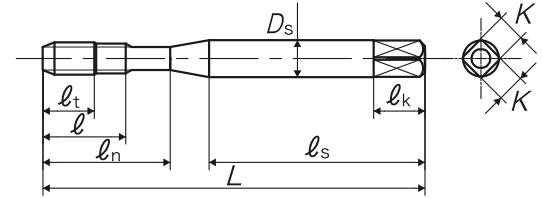
Precision Machinery/
Medical Surgical Instruments

⑫

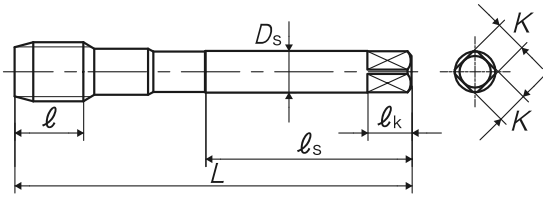
JIS

①-170

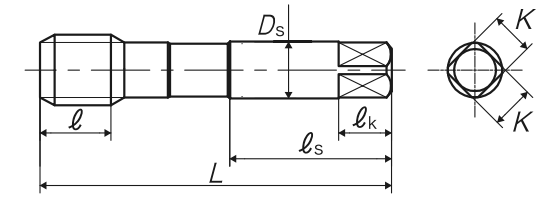
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1D

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	MSRP
For Metric Threads														
M3 × 0.5	P2	ZETBMQ3.0G	3P	46	5	9	14	26	4	3.2	6	3	1	¥ 2,880
M4 × 0.7	P3	ZETBMR4.0I	3P	52	7	11	17	29	5	4	7	3	1	¥ 2,880
M5 × 0.8	P3	ZETBMR5.0K	3P	60	9	13	22	33	5.5	4.5	7	3	1	¥ 2,900
M6 × 1	P3	ZETBMR6.0M	3P	62	11	15	26	33	6	4.5	7	3	1	¥ 3,200
M8 × 1.25	P3	ZETBMR8.0N	3P	70	-	12	-	36	6.2	5	8	3	2	¥ 4,460
M10 × 1.5	P3	ZETBMR010O	3P	75	-	13	-	38	7	5.5	8	3	2	¥ 5,670
M10 × 1.25	P3	ZETBMR010N	3P	75	-	13	-	38	7	5.5	8	3	2	¥ 5,670
M12 × 1.75	P3	ZETBMR012P	3P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 8,030
M12 × 1.5	P3	ZETBMR012O	3P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 8,030 ※
M12 × 1.25	P3	ZETBMR012N	3P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 8,030 ※
M14 × 2	P3	ZETBMR014Q	3P	88	-	18	-	45	10.5	8	11	3	2	¥ 11,000 ※
M14 × 1.5	P3	ZETBMR014O	3P	88	-	14	-	45	10.5	8	11	3	2	¥ 11,000 ※
M16 × 2	P3	ZETBMR016Q	3P	95	-	18	-	48	12.5	10	13	4	2	¥ 14,800 ※
M16 × 1.5	P3	ZETBMR016O	3P	95	-	14	-	48	12.5	10	13	4	2	¥ 14,800 ※
M18 × 2.5	P4	ZETBMS018R	3P	100	-	20	-	51	14	11	14	4	2	¥ 19,700 ※
M18 × 1.5	P3	ZETBMR018O	3P	100	-	14	-	51	14	11	14	4	2	¥ 19,700 ※
M20 × 2.5	P4	ZETBMS020R	3P	105	-	20	-	50	15	12	15	4	3	¥ 26,700 ※
M20 × 1.5	P4	ZETBMS020O	3P	105	-	14	-	50	15	12	15	4	3	¥ 26,700 ※
M27 × 3	P4	ZETBMS027S	3P	130	-	25	-	60	20	15	18	4	3	¥ 59,700 ※
M30 × 3.5	P5	ZETBMT030T	3P	135	-	30	-	62	23	17	20	4	3	¥ 76,100 ※
For Unified Threads														
No.4-40UNC	P2	ZETBMQUN4H	3P	46	5	9	14	25	4	3.2	6	3	1	¥ 3,630 ※
No.6-32UNC	P3	ZETBMRUN6J	3P	52	7	11	17	27	5	4	7	3	1	¥ 3,380 ※
No.8-32UNC	P3	ZETBMRUN8J	3P	60	7	13	22	31	5.5	4.5	7	3	1	¥ 3,400 ※
No.10-24UNC	P3	ZETBMRUNAM	3P	60	9	13	22	32	5.5	4.5	7	3	1	¥ 3,400 ※
No.10-32UNF	P3	ZETBMRUNAJ	3P	60	9	13	22	32	5.5	4.5	7	3	1	¥ 3,400 ※
1/4-20UNC	P3	ZETBMRU04N	3P	62	11	15	26	33	6	4.5	7	3	1	¥ 3,650 ※
1/4-28UNF	P3	ZETBMRU04K	3P	62	11	15	26	33	6	4.5	7	3	1	¥ 3,650 ※
5/16-18UNC	P3	ZETBMRU05O	3P	70	-	12	-	36	6.2	5	8	3	2	¥ 5,130 ※
5/16-24UNF	P3	ZETBMRU05M	3P	70	-	12	-	36	6.2	5	8	3	2	¥ 5,130 ※
3/8-16UNC	P3	ZETBMRU06P	3P	75	-	13	-	38	7	5.5	8	3	2	¥ 6,570 ※
3/8-24UNF	P3	ZETBMRU06M	3P	75	-	13	-	38	7	5.5	8	3	2	¥ 6,570 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

JIS

ZET-B Spiral Fluted Taps for Titanium Alloys

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
7/16-14UNC	P3	ZETBMRU07Q	3P	82	-	13	-	42	8.5	6.5	9	3	2	¥ 9,260 ※
7/16-20UNF	P3	ZETBMRU07N	3P	82	-	13	-	42	8.5	6.5	9	3	2	¥ 9,260 ※
1/2-13UNC	P3	ZETBMRU08R	3P	88	-	15	-	45	10.5	8	11	3	2	¥ 9,820 ※
1/2-20UNF	P3	ZETBMRU08N	3P	88	-	15	-	45	10.5	8	11	3	2	¥ 9,820 ※
5/8-11UNC	P3	ZETBMRU10U	3P	95	-	18	-	48	12.5	10	13	4	2	¥ 14,800 ※
5/8-18UNF	P3	ZETBMRU10O	3P	95	-	14	-	48	12.5	10	13	4	2	¥ 14,800 ※
3/4-10UNC	P4	ZETBMSU12V	3P	105	-	20	-	50	15	12	15	4	3	¥ 26,700 ※
3/4-16UNF	P4	ZETBMSU12P	3P	105	-	14	-	50	15	12	15	4	3	¥ 26,700 ※

①

Spiral Fluted Taps
(for blind hole)

②

Spiral Fluted Taps
(for through hole)

③

Spiral Pointed Taps
(for through hole)

④

Hand Taps

⑤

Cemented Carbide Taps

⑥

Roll Taps

⑦

Special Thread Taps
Simple Inspection Tools

⑧

Pipe Taps

⑨

Thread Mills
Premium Thread Mills

⑩

Dies

⑪

Center Drills
Centering Tools

⑫

Precision Machinery/
Medical Surgical Instruments

JIS

①-171

 Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

Spiral Fluted Tap Series for blind hole

ANSI

ZELX TI SP

Spiral Fluted Taps for Titanium Alloys

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



Specification

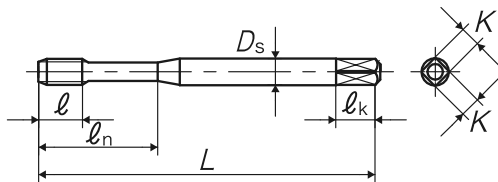


■ Spiral fluted tap suitable for titanium alloys which, including titanium as the main composition, are tough, light and heat resistant.

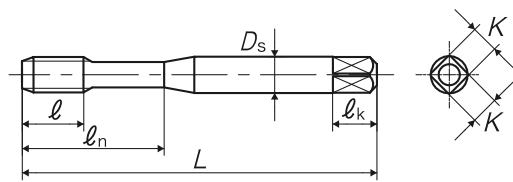
Tapping Speed depending on Materials

Titanium alloys
チタン合金
5~10
(m/min)

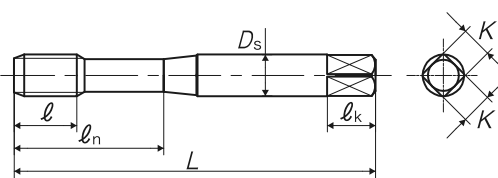
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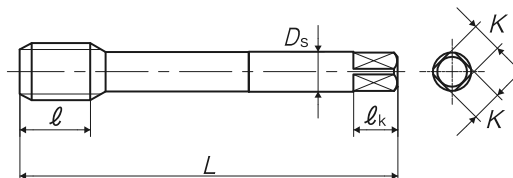
TYPE:2



TYPE:3



TYPE:4



Segment : 1D

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	TYPE
For Metric threads											
M2.5 × 0.45	D3	Y87700	3P	1.812	0.157	0.5	0.141	0.11	0.187	3	1
M3 × 0.5	D3	Y87701	3P	1.937	0.197	0.625	0.141	0.11	0.187	3	1
M3.5 × 0.6	D4	Y87702	3P	2	0.276	0.687	0.141	0.11	0.187	3	1
M4 × 0.7	D4	Y87703	3P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
M5 × 0.8	D4	Y87704	3P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
M6 × 1	D5	Y87705	3P	2.5	0.433	1	0.255	0.191	0.312	3	2
M7 × 1	D5	Y87706	3P	2.718	0.433	1.125	0.318	0.238	0.375	3	3
M8 × 1.25	D5	Y87708	3P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
M8 × 1	D5	Y87707	3P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
M10 × 1.5	D6	Y87710	3P	2.937	0.512	1.25	0.381	0.286	0.437	3	3
M10 × 1.25	D5	Y87709	3P	2.937	0.472	1.25	0.381	0.286	0.437	3	3
M12 × 1.75	D6	Y87712	3P	3.375	0.591	-	0.367	0.275	0.437	3	4
M12 × 1.25	D5	Y87711	3P	3.375	0.551	-	0.367	0.275	0.437	3	4

• This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

1

ANSI

Spiral Fluted Taps
(for blind hole)

1

Spiral Fluted Taps
(for through hole)

2

Spiral Pointed Taps
(for through hole)

3

Hand Taps

4

Cemented
Carbide Taps

5

Roll Taps

6

Special Thread Taps
Simple Inspection Tools

7

Pipe Taps

8

Thread Mills
Premium Thread Mills

9

Dies

10

Center Drills
Centering Tools

11

Precision Machinery/
Medical Surgical Instruments

12

ANSI

1-172

① Spiral Fluted Tap Series for blind hole

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

ANSI

ZELX TI SP Spiral Fluted Taps for Titanium Alloys

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
For Unified Threads											
No.2-56UNC	GH2	Y87623	3P	1.75	0.157	0.437	0.141	0.11	0.187	3	1
No.4-40UNC	GH2	Y87601	3P	1.875	0.236	0.562	0.141	0.11	0.187	3	1
No.4-40UNC	GH4	Y87612	3P	1.875	0.236	0.562	0.141	0.11	0.187	3	1
No.4-40UNC	GH4	Y87001	1.5P	1.875	0.236	0.562	0.141	0.11	0.187	3	1
No.6-32UNC	GH3	Y87605	3P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH3	Y87606	1.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH4	Y87608	3P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH5	Y87635	3P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.8-32UNC	GH3	Y87607	3P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH3	Y87007	1.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH4	Y87629	3P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH5	Y87637	3P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH6	Y87660	3P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH7	Y87667	3P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.10-24UNC	GH3	Y87609	3P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH3	Y81608	1.5P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH3	Y87610	3P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH3	Y87010	1.5P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH4	Y87630	3P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH5	Y87640	3P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH6	Y87661	3P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH7	Y87670	3P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
1/4-20UNC	GH3	Y87613	3P	2.5	0.433	1	0.255	0.191	0.312	3	2
1/4-20UNC	GH3	Y87628	1.5P	2.5	0.433	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	Y87614	3P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	Y87014	1.5P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	Y87631	3P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH5	Y87644	3P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH6	Y87662	3P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH7	Y87674	3P	2.5	0.354	1	0.255	0.191	0.312	3	2
5/16-18UNC	GH3	Y87615	3P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
5/16-18UNC	GH3	Y87695	1.5P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	Y87616	3P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	Y87016	1.5P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	Y87632	3P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH5	Y87646	3P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH6	Y87663	3P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH7	Y87676	3P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	Y87617	3P	2.937	0.551	1.25	0.381	0.286	0.437	3	3
3/8-16UNC	GH3	Y87611	1.5P	2.937	0.551	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	Y87618	3P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	Y87018	1.5P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	Y87633	3P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH5	Y87648	3P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH6	Y87664	3P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH7	Y87678	3P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
7/16-14UNC	GH3	Y87619	3P	3.156	0.591	-	0.323	0.242	0.406	3	4
7/16-14UNC	GH3	Y81629	1.5P	3.156	0.591	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH3	Y87620	3P	3.156	0.472	-	0.323	0.242	0.406	3	4

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented
Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

①-173

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

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

ZELX TI SP Spiral Fluted Taps for Titanium Alloys

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
7/16-20UNF	GH3	Y87020	1.5P	3.156	0.472	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH5	Y87650	3P	3.156	0.472	-	0.323	0.242	0.406	3	4
1/2-13UNC	GH3	Y87621	3P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH3	Y87021	1.5P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH5	Y87626	3P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	Y87622	3P	3.375	0.472	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	Y87023	1.5P	3.375	0.472	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH5	Y87652	3P	3.375	0.472	-	0.367	0.275	0.437	3	4

1

ANSI

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

ANSI

①-174

• This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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	D _s	K	ℓ _k

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-175

DIN

ZET-B

Spiral Fluted Taps for Titanium Alloys



Specification

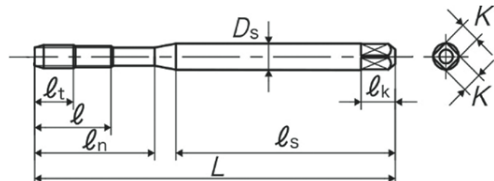


■ ZET-B is the spiral fluted tap for titanium alloys which, including titanium as the main composition, are tough, light and heat resistant.

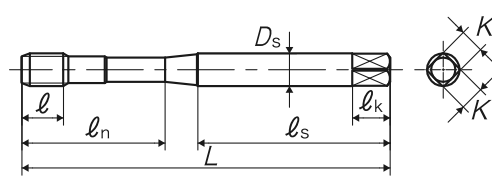
Tapping Speeds depending on Materials

Titanium alloys
チタン合金
5~10
(m/min)

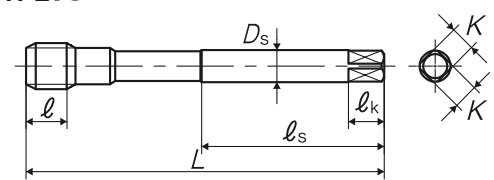
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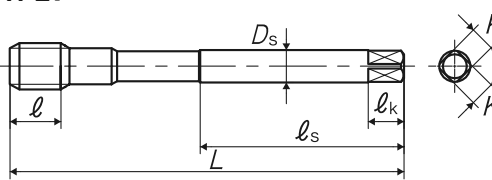
TYPE:2



TYPE:3



TYPE:4



Segment : 1D

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
For Metric Threads													
M3 × 0.5	ISO2X	SD3.0GBIPN	3P	56	5	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2X	SD4.0IBIPN	3P	63	7	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2X	SD5.0KBIPN	3P	70	9	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2X	SD6.0MBIPN	3P	80	11	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	SD8.0NBIPN	3P	90	-	12	35	47	8	6.2	9	3	2
M10 × 1.5	ISO2X	SD10.0BIPN	3P	100	-	13	39	52.5	10	8	11	3	2
M10 × 1.25	ISO2X	SM010NBIPN	3P	100	-	13	-	51	7	5.5	8	3	3
M12 × 1.75	ISO2X	SG012PBIPN	3P	110	-	15	-	56	9	7	10	3	4
M12 × 1.5	ISO2X	SM012OBIPN	3P	100	-	15	-	51	9	7	10	3	3
M12 × 1.25	ISO2X	SM012NBIPN	3P	100	-	15	-	51	9	7	10	3	3
M14 × 2	ISO2X	SG014QBIPN	3P	110	-	18	-	56	11	9	12	3	4
M14 × 1.5	ISO2X	SM014OBIPN	3P	100	-	14	-	51	11	9	12	3	3
M16 × 2	ISO2X	SG016QBIPN	3P	110	-	18	-	56	12	9	12	4	4
M16 × 1.5	ISO2X	SM016OBIPN	3P	100	-	14	-	51	12	9	12	4	3
M18 × 2.5	ISO2X	SG018RBIPN	3P	125	-	20	-	64	14	11	14	4	4
M20 × 2.5	ISO2X	SG020RBIPN	3P	140	-	20	-	71	16	12	15	4	4
M22 × 2.5	ISO2X	SG022RBIPN	3P	140	-	20	-	71	18	14.5	17	4	4
M24 × 3	ISO2X	SG024SBIPN	3P	160	-	25	-	82	18	14.5	17	4	4

Think threads with
YAMAWA

・ This product is different from JIS products in shape and dimensions, please be careful when using.

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)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
For Unified Threads													
No.4-40UNC	2BX	SDUN4HYIPN	3P	56	11	5	18	34	3.5	2.7	6	3	1
No.6-32UNC	2BX	SDUN6JYIPN	3P	56	7	11	19	32	4	3	6	3	1
No.6-40UNF	2BX	SDUN6HYIPN	3P	56	7	11	19	32	4	3	6	3	1
No.8-32UNC	2BX	SDUN8JYIPN	3P	63	7	13	21	38	4.5	3.4	6	3	1
No.10-24UNC	2BX	SDUNAMYIPN	3P	70	9	14	24	39	6	4.9	8	3	1
No.10-32UNF	2BX	SDUNAJYIPN	3P	70	9	14	24	39	6	4.9	8	3	1
1/4-20UNC	2BX	SDU04NYIPN	3P	80	11	15	30	42	7	5.5	8	3	1
1/4-28UNF	2BX	SDU04KYIPN	3P	80	11	15	30	42	7	5.5	8	3	1
5/16-18UNC	2BX	SDU05OYIPN	3P	90	-	12	35	47	8	6.2	9	3	2
5/16-24UNF	2BX	SMU05MYIPN	3P	90	-	12	-	46	6	4.9	8	3	3
3/8-16UNC	2BX	SDU06PYIPN	3P	100	-	13	39	54.5	9	7	10	3	2
3/8-24UNF	2BX	SMU06MYIPN	3P	100	-	13	-	51	7	5.5	8	3	3
1/2-13UNC	2BX	SGU08RYIPN	3P	110	-	15	-	56	9	7	10	3	4
1/2-20UNF	2BX	SMU08NYIPN	3P	100	-	15	-	51	9	7	10	3	3
5/8-11UNC	2BX	SGU10UYIPN	3P	110	-	18	-	56	12	9	12	4	4
3/4-10UNC	2BX	SGU12VYIPN	3P	125	-	20	-	64	14	11	14	4	4

1

DIN

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

DIN

①-176

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-177



ZEN-B

Spiral Fluted Taps for Nickel Base Alloys



Specification



Tapping Speeds depending on Materials

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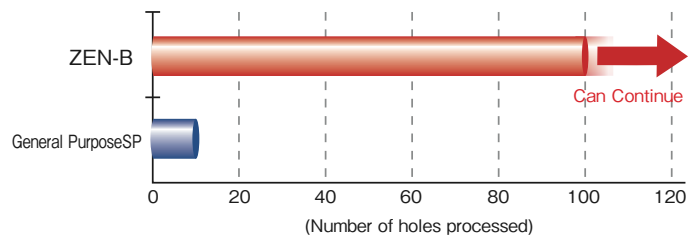
Product Features

- The tap is produced from a high grade powder high speed steel that is excellent for heat resistance and wear resistance.
- The optimum thread relief is adopted in consideration of the shrinkage and cutting heat for Nickel Base Alloys.
- The ZEN-B has a flute design for nickel base alloy to smooth the discharge of chips.
- Optimum surface treatment is applied to prevent welding.
- Considering the shrinkage of the internal screw thread, the tap is produced to a moderate oversize condition.

Tapping Data

Tapping Conditions [M6×1]

Work Piece Material	Hastelloy C-276
Bored Hole Size	φ5.0
Tapping Length	10mm
Tapping Speed	5m/min
Machinery Type	CNC tapping center
Tapping Fluid	Water soluble cutting fluid



Characteristics of nickel base alloys

- Nickel based alloys have much better corrosion and heat resistance than steel. In general, nickel based alloys are much more difficult to process than steels and stainless steels. Nickel based alloys include A286, inconels, hastelloys, waspalloys and more. There are many kinds of nickel based alloys, but one of the more difficult ones to cut is inconel 718.

Types of tapping problems

- Nickel based alloys have high temperature strength and the thermal diffusivity is small so, abrupt abrasion occurs on the tap.
- The material tends to spring back so, internal threads may shrink or the tap may be crimped causing breakage.
- The material tends to cause welding on the cutting chamfer and the thread flank surface. The finished surface of the internal screw thread can become rough.

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

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

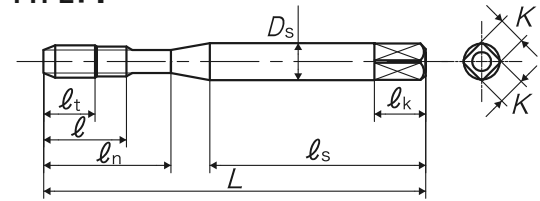
Precision Machinery/
Medical Surgical Instruments

⑫

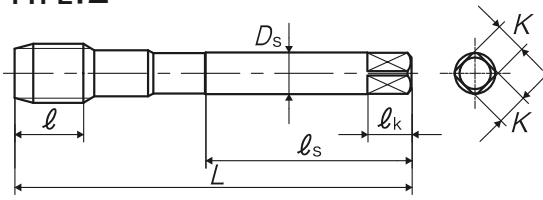
JIS

①-178

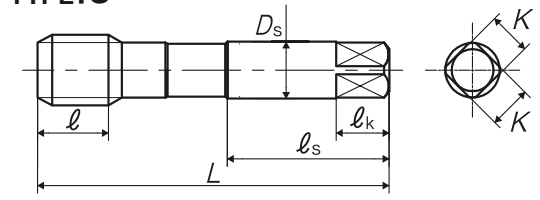
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1D

Size	Class	Code	Chamfer	L (mm)	lt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
For Metric Threads														
M3 × 0.5	P2	ZENBMQ3.0G	3P	46	5	9	14	26	4	3.2	6	3	1	¥ 2,880
M4 × 0.7	P3	ZENBMR4.0I	3P	52	7	11	17	29	5	4	7	3	1	¥ 2,880
M5 × 0.8	P3	ZENBMR5.0K	3P	60	9	13	22	33	5.5	4.5	7	3	1	¥ 2,900
M6 × 1	P3	ZENBMR6.0M	3P	62	11	15	26	33	6	4.5	7	3	1	¥ 3,200
M8 × 1.25	P3	ZENBMR8.0N	3P	70	-	12	-	36	6.2	5	8	3	2	¥ 4,460
M10 × 1.5	P3	ZENBMR010O	3P	75	-	13	-	38	7	5.5	8	3	2	¥ 5,670
M10 × 1.25	P3	ZENBMR010N	3P	75	-	13	-	38	7	5.5	8	3	2	¥ 5,670
M12 × 1.75	P3	ZENBMR012P	3P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 8,030
M12 × 1.5	P3	ZENBMR012O	3P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 8,030 *
M12 × 1.25	P3	ZENBMR012N	3P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 8,030 *
M14 × 2	P3	ZENBMR014Q	3P	88	-	18	-	45	10.5	8	11	3	2	¥ 11,000 *
M14 × 1.5	P3	ZENBMR014O	3P	88	-	14	-	45	10.5	8	11	3	2	¥ 11,000 *
M16 × 2	P3	ZENBMR016Q	3P	95	-	18	-	48	12.5	10	13	3	2	¥ 14,800 *
M16 × 1.5	P3	ZENBMR016O	3P	95	-	14	-	48	12.5	10	13	3	2	¥ 14,800 *
M18 × 2.5	P4	ZENBMS018R	3P	100	-	20	-	51	14	11	14	4	2	¥ 19,700 *
M18 × 1.5	P3	ZENBMR018O	3P	100	-	14	-	51	14	11	14	4	2	¥ 19,700 *
M20 × 2.5	P4	ZENBMS020R	3P	105	-	20	-	50	15	12	15	4	3	¥ 26,700 *
M20 × 1.5	P4	ZENBMS020O	3P	105	-	14	-	50	15	12	15	4	3	¥ 26,700 *
For Unified Threads														
No.4-40UNC	P2	ZENBMQUN4H	3P	46	5	9	14	25	4	3.2	6	3	1	¥ 3,630 *
No.6-32UNC	P3	ZENBMRUN6J	3P	52	7	11	17	27	5	4	7	3	1	¥ 3,380 *
No.8-32UNC	P3	ZENBMRUN8J	3P	60	7	13	22	31	5.5	4.5	7	3	1	¥ 3,400 *
No.10-24UNC	P3	ZENBMRUNAM	3P	60	9	13	22	32	5.5	4.5	7	3	1	¥ 3,400 *
No.10-32UNF	P3	ZENBMRUNAJ	3P	60	9	13	22	32	5.5	4.5	7	3	1	¥ 3,400 *
1/4-20UNC	P3	ZENBMRU04N	3P	62	11	15	26	33	6	4.5	7	3	1	¥ 3,650 *
1/4-28UNF	P3	ZENBMRU04K	3P	62	11	15	26	33	6	4.5	7	3	1	¥ 3,650 *
5/16-18UNC	P3	ZENBMRU05O	3P	70	-	12	-	36	6.2	5	8	3	2	¥ 5,130 *
5/16-24UNF	P3	ZENBMRU05M	3P	70	-	12	-	36	6.2	5	8	3	2	¥ 5,130 *
3/8-16UNC	P3	ZENBMRU06P	3P	75	-	13	-	38	7	5.5	8	3	2	¥ 6,570 *
3/8-24UNF	P3	ZENBMRU06M	3P	75	-	13	-	38	7	5.5	8	3	2	¥ 6,570 *
7/16-14UNC	P3	ZENBMRU07Q	3P	82	-	13	-	42	8.5	6.5	9	3	2	¥ 9,260 *
7/16-20UNF	P3	ZENBMRU07N	3P	82	-	13	-	42	8.5	6.5	9	3	2	¥ 9,260 *

* = Specified Distribution Items. Made to order products.

 Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

JIS

ZEN-B Spiral Fluted Taps for Titanium Alloys

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
1/2-13UNC	P3	ZENBMRU08R	3P	88	-	15	-	45	10.5	8	11	3	2	¥ 9,820 ※
1/2-20UNF	P3	ZENBMRU08N	3P	88	-	15	-	45	10.5	8	11	3	2	¥ 9,820 ※
5/8-11UNC	P3	ZENBMRU10U	3P	95	-	18	-	48	12.5	10	13	3	2	¥ 14,800 ※
5/8-18UNF	P3	ZENBMRU10O	3P	95	-	14	-	48	12.5	10	13	3	2	¥ 14,800 ※
3/4-10UNC	P4	ZENBMSU12V	3P	105	-	20	-	50	15	12	15	4	3	¥ 26,700 ※
3/4-16UNF	P4	ZENBMSU12P	3P	105	-	14	-	50	15	12	15	4	3	¥ 26,700 ※

①

Spiral Fluted Taps
(for blind hole)

②

Spiral Fluted Taps
(for through hole)

③

Spiral Pointed Taps
(for through hole)

④

Hand Taps

⑤

Cemented Carbide Taps

⑥

Roll Taps

⑦

Special Thread Taps
Simple Inspection Tools

⑧

Pipe Taps

⑨

Thread Mills
Premium Thread Mills

⑩

Dies

⑪

Center Drills
Centering Tools

⑫

Precision Machinery/
Medical Surgical Instruments

JIS

MEMO

① Spiral Fluted Tap Series for blind hole

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

ANSI

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

ZELX NI SP

Spiral Fluted Taps for Nickel Base Alloys



Specification



■ ZELX NI SP 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.

Tapping Speed depending on Materials

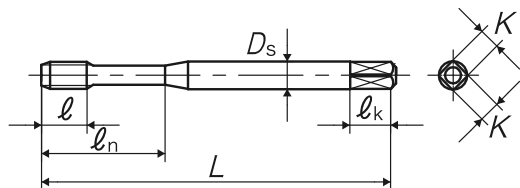
Medium carbon steels
中炭素鋼
5~15
(m/min)

High carbon steels
高炭素鋼
5~15
(m/min)

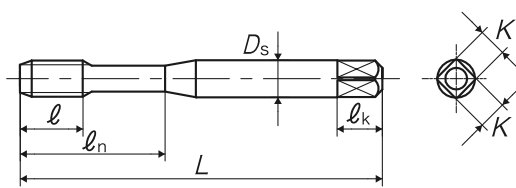
Stainless steels
ステンレス鋼
5~15
(m/min)

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

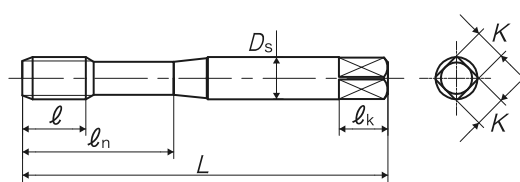
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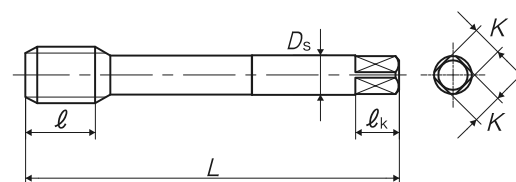
TYPE:2



TYPE:3



TYPE:4



Segment : 1D

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	TYPE
For Metric Threads											
M2.5 × 0.45	D3	Y88320	3P	1.812	0.157	0.5	0.141	0.11	0.187	3	1
M3 × 0.5	D3	Y88321	3P	1.937	0.197	0.625	0.141	0.11	0.187	3	1
M3.5 × 0.6	D4	Y88322	3P	2	0.276	0.687	0.141	0.11	0.187	3	1
M4 × 0.7	D4	Y88323	3P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
M5 × 0.8	D4	Y88324	3P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
M6 × 1	D5	Y88325	3P	2.5	0.433	1	0.255	0.191	0.312	3	2
M7 × 1	D5	Y88326	3P	2.718	0.433	1.125	0.318	0.238	0.375	3	3
M8 × 1.25	D5	Y88328	3P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
M8 × 1	D5	Y88327	3P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
M10 × 1.5	D6	Y88330	3P	2.937	0.512	1.25	0.381	0.286	0.437	3	3
M10 × 1.25	D5	Y88329	3P	2.937	0.472	1.25	0.381	0.286	0.437	3	3
M12 × 1.75	D6	Y88332	3P	3.375	0.591	-	0.367	0.275	0.437	3	4
M12 × 1.25	D5	Y88331	3P	3.375	0.551	-	0.367	0.275	0.437	3	4
For Unified Threads											
No.2-56UNC	GH2	Y87523	3P	1.75	0.157	0.437	0.141	0.11	0.187	3	1
No.4-40UNC	GH2	Y87501	3P	1.875	0.236	0.562	0.141	0.11	0.187	3	1
No.4-40UNC	GH2	Y87583	1.5P	1.875	0.236	0.562	0.141	0.11	0.187	3	1

ANSI

①-181

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

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

1

ANSI

Spiral Fluted Taps
(for blind hole) ①Spiral Fluted Taps
(for through hole) ②Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪Precision Machinery/
Medical Surgical Instruments ⑫

ANSI

①-182

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
No.4-40UNC	GH3	Y87502	3P	1.875	0.236	0.562	0.141	0.11	0.187	3	1
No.4-40UNC	GH3	Y87002	1.5P	1.875	0.236	0.562	0.141	0.11	0.187	3	1
No.4-40UNC	GH4	Y87512	3P	1.875	0.236	0.562	0.141	0.11	0.187	3	1
No.4-40UNC	GH5	Y87534	3P	1.875	0.236	0.562	0.141	0.11	0.187	3	1
No.4-40UNC	GH5	Y87072	1.5P	1.875	0.236	0.562	0.141	0.11	0.187	3	1
No.5-40UNC	GH2	Y87504	3P	1.937	0.236	0.625	0.141	0.11	0.187	3	1
No.6-32UNC	GH2	Y87006	1.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH3	Y87505	3P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH3	Y87005	1.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH4	Y87508	3P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH5	Y87535	3P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH5	Y87035	1.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH6	Y87559	3P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH7	Y87565	3P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.8-32UNC	GH2	Y87506	3P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH3	Y87507	3P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH3	Y87580	1.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH4	Y87529	3P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH5	Y87537	3P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH5	Y87037	1.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH6	Y87560	3P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH7	Y87567	3P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.10-24UNC	GH3	Y87509	3P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH3	Y87009	1.5P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH5	Y87539	3P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH5	Y87039	1.5P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH2	Y87511	3P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH3	Y87510	3P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH3	Y81556	1.5P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH4	Y87530	3P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH5	Y87540	3P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH5	Y87040	1.5P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH6	Y87561	3P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH7	Y87570	3P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
1/4-20UNC	GH3	Y87513	3P	2.5	0.433	1	0.255	0.191	0.312	3	2
1/4-20UNC	GH3	Y87013	1.5P	2.5	0.433	1	0.255	0.191	0.312	3	2
1/4-20UNC	GH5	Y87543	3P	2.5	0.433	1	0.255	0.191	0.312	3	2
1/4-20UNC	GH5	Y87043	1.5P	2.5	0.433	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	Y87514	3P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	Y87579	1.5P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	Y87531	3P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	Y87031	1.5P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH5	Y87544	3P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH5	Y87443	1.5P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH6	Y87562	3P	2.5	0.354	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH7	Y87574	3P	2.5	0.354	1	0.255	0.191	0.312	3	2
5/16-18UNC	GH3	Y87515	3P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
5/16-18UNC	GH3	Y87015	1.5P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
5/16-18UNC	GH5	Y87545	3P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
5/16-18UNC	GH5	Y87045	1.5P	2.718	0.472	1.125	0.318	0.238	0.375	3	3

· This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

ANSI

ZELX NI SP Spiral Fluted Taps for Nickel Base Alloys

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
5/16-24UNF	GH3	Y87516	3P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	Y87577	1.5P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	Y87532	3P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	Y87032	1.5P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH5	Y87546	3P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH6	Y87563	3P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH7	Y87576	3P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	Y87517	3P	2.937	0.551	1.25	0.381	0.286	0.437	3	3
3/8-16UNC	GH3	Y87017	1.5P	2.937	0.551	1.25	0.381	0.286	0.437	3	3
3/8-16UNC	GH5	Y87547	3P	2.937	0.551	1.25	0.381	0.286	0.437	3	3
3/8-16UNC	GH5	Y87047	1.5P	2.937	0.551	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	Y87518	3P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	Y87575	1.5P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	Y87533	3P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	Y87033	1.5P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	Y87033	1.5P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH5	Y87548	3P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH5	Y87048	1.5P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH6	Y87564	3P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH7	Y87578	3P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
7/16-14UNC	GH3	Y87519	3P	3.156	0.591	-	0.323	0.242	0.406	3	4
7/16-14UNC	GH3	Y87019	1.5P	3.156	0.591	-	0.323	0.242	0.406	3	4
7/16-14UNC	GH5	Y87549	3P	3.156	0.591	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH3	Y87520	3P	3.156	0.472	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH3	Y87573	1.5P	3.156	0.472	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH5	Y87550	3P	3.156	0.472	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH5	Y87050	1.5P	3.156	0.472	-	0.323	0.242	0.406	3	4
1/2-13UNC	GH3	Y87521	3P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH3	Y87500	1.5P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH5	Y87551	3P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH5	Y87051	1.5P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH7	Y87581	3P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	Y87522	3P	3.375	0.472	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	Y87022	1.5P	3.375	0.472	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH5	Y87552	3P	3.375	0.472	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH7	Y87582	3P	3.375	0.472	-	0.367	0.275	0.437	3	4
9/16-18UNF	GH3	Y88554	3P	3.593	0.512	-	0.429	0.322	0.5	3	4
9/16-18UNF	GH5	Y88542	3P	3.593	0.512	-	0.429	0.322	0.5	3	4
5/8-11UNC	GH3	Y87525	3P	3.812	0.748	-	0.48	0.36	0.562	4	4
5/8-11UNC	GH3	Y87025	1.5P	3.812	0.748	-	0.48	0.36	0.562	4	4
5/8-11UNC	GH5	Y87555	3P	3.812	0.748	-	0.48	0.36	0.562	4	4
5/8-11UNC	GH7	Y87585	3P	3.812	0.748	-	0.48	0.36	0.562	4	4
5/8-18UNF	GH3	Y87526	3P	3.812	0.512	-	0.48	0.36	0.562	4	4
5/8-18UNF	GH3	Y81508	1.5P	3.812	0.512	-	0.48	0.36	0.562	4	4
5/8-18UNF	GH4	Y87536	3P	3.812	0.512	-	0.48	0.36	0.562	4	4
5/8-18UNF	GH5	Y87556	3P	3.812	0.512	-	0.48	0.36	0.562	4	4
5/8-18UNF	GH7	Y87586	3P	3.812	0.512	-	0.48	0.36	0.562	4	4
3/4-10UNC	GH3	Y87527	3P	4.25	0.827	-	0.59	0.442	0.687	4	4
3/4-10UNC	GH3	Y87027	1.5P	4.25	0.827	-	0.59	0.442	0.687	4	4
3/4-10UNC	GH5	Y87557	3P	4.25	0.827	-	0.59	0.442	0.687	4	4
3/4-16UNF	GH3	Y87528	3P	4.25	0.591	-	0.59	0.442	0.687	4	4
3/4-16UNF	GH5	Y87558	3P	4.25	0.591	-	0.59	0.442	0.687	4	4

ANSI

Spiral Fluted Tap Series for blind hole

DIN

ZEN-B

Spiral Fluted Taps for Nickel Base Alloys



Specification

HSS-P

OX
Oxide



Synchro
nized

■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.

Tapping Speeds depending on Materials

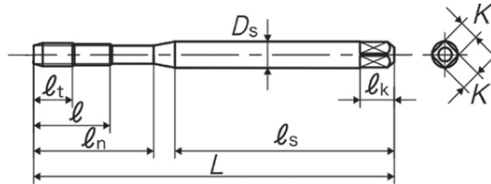
Low carbon steels
低炭素鋼
5~15
(m/min)

Medium carbon steels
中炭素鋼
5~15
(m/min)

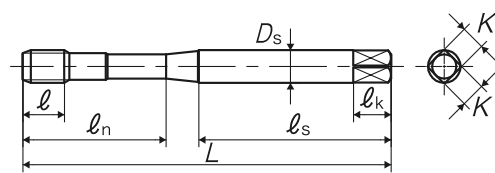
Stainless steels
ステンレス鋼
5~15
(m/min)

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

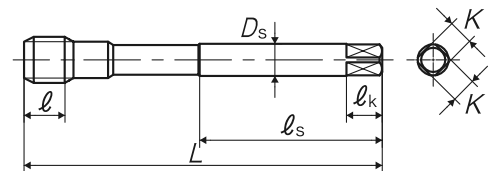
TYPE:1



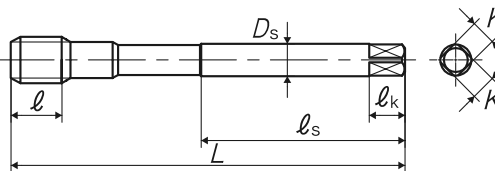
TYPE:2



TYPE:3



TYPE:4



Segment : 1D

Size	Class	Code	Chamfer	L (mm)	lt (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	TYPE
For Metric Threads													
M3 × 0.5	ISO2X	SD3.0GBJPX	3P	56	5	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2X	SD4.0IBJPX	3P	63	7	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2X	SD5.0KBJPX	3P	70	9	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2X	SD6.0MBJPX	3P	80	11	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	SD8.0NBJPX	3P	90	-	12	35	47	8	6.2	9	3	2
M10 × 1.5	ISO2X	SD010OBJPX	3P	100	-	13	39	52.5	10	8	11	3	2
M10 × 1.25	ISO2X	SM010NBJPX	3P	100	-	13	-	51	7	5.5	8	3	3
M12 × 1.75	ISO2X	SG012PBJPX	3P	110	-	15	-	56	9	7	10	3	4
M12 × 1.5	ISO2X	SM012OBJPX	3P	100	-	15	-	51	9	7	10	3	3
M12 × 1.25	ISO2X	SM012NBJPX	3P	100	-	15	-	51	9	7	10	3	3
M14 × 2	ISO2X	SG014QBJPX	3P	110	-	18	-	56	11	9	12	3	4
M14 × 1.5	ISO2X	SM014OBJPX	3P	100	-	14	-	51	11	9	12	3	3
M16 × 2	ISO2X	SG016QBJPX	3P	110	-	18	-	56	12	9	12	3	4
M16 × 1.5	ISO2X	SM016OBJPX	3P	100	-	14	-	51	12	9	12	3	3
M18 × 2.5	ISO2X	SG018RBJPX	3P	125	-	20	-	64	14	11	14	4	4
M20 × 2.5	ISO2X	SG020RBJPX	3P	140	-	20	-	71	16	12	15	4	4
M22 × 2.5	ISO2X	SG022RBJPX	3P	140	-	20	-	71	18	14.5	17	4	4
M24 × 3	ISO2X	SG024SBJPX	3P	160	-	25	-	82	18	14.5	17	4	4

· This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

1

DIN

Spiral Fluted Taps
(for blind hole)
①

Spiral Fluted Taps
(for through hole)
②

Spiral Pointed Taps
(for through hole)
③

Hand Taps
④

Cemented
Carbide Taps
⑤

Roll Taps
⑥

Special Thread Taps
Simple Inspection Tools
⑦

Pipe Taps
⑧

Thread Mills
Premium Thread Mills
⑨

Dies
⑩

Center Drills
Centering Tools
⑪

Precision Machinery/
Medical Surgical Instruments
⑫

DIN

①-184

① Spiral Fluted Tap Series for blind hole

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

DIN

ZEN-B Spiral Fluted Taps for Nickel Base Alloys

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
For Unified Threads													
No.4-40UNC	2BX	SDUN4HYJPX	3P	56	11	5	18	34	3.5	2.7	6	3	1
No.6-32UNC	2BX	SDUN6JYJPX	3P	56	7	11	19	32	4	3	6	3	1
No.8-32UNC	2BX	SDUN8JYJPX	3P	63	7	13	21	38	4.5	3.4	6	3	1
No.10-24UNC	2BX	SDUNAMYJPX	3P	70	9	14	24	39	6	4.9	8	3	1
No.10-32UNF	2BX	SDUNA JYJPX	3P	70	9	14	24	39	6	4.9	8	3	1
1/4-20UNC	2BX	SDU04NYJPX	3P	80	11	15	30	42	7	5.5	8	3	1
1/4-28UNF	2BX	SDU04KYJPX	3P	80	11	15	30	42	7	5.5	8	3	1
5/16-18UNC	2BX	SDU05OYJPX	3P	90	-	12	35	47	8	6.2	9	3	2
5/16-24UNF	2BX	SMU05MYJPX	3P	90	-	12	-	46	6	4.9	8	3	3
3/8-16UNC	2BX	SDU06PYJPX	3P	100	-	13	39	54.5	9	7	10	3	2
3/8-24UNF	2BX	SMU06MYJPX	3P	100	-	13	-	51	7	5.5	8	3	3
7/16-20UNF	2BX	SMU07NYJPX	3P	100	-	13	-	51	8	6.2	9	3	3
1/2-13UNC	2BX	SGU08RYJPX	3P	110	-	15	-	56	9	7	10	3	4
1/2-20UNF	2BX	SMU08NYJPX	3P	100	-	15	-	51	9	7	10	3	3
9/16-18UNF	2BX	SMU09OYJPX	3P	100	-	14	-	51	11	9	12	3	3
5/8-11UNC	2BX	SGU10UYJPX	3P	110	-	18	-	56	12	9	12	3	4
5/8-18UNF	2BX	SMU10OYJPX	3P	100	-	14	-	51	12	9	12	3	3
3/4-10UNC	2BX	SGU12VYJPX	3P	125	-	20	-	64	14	11	14	4	4
3/4-16UNF	2BX	SMU12PYJPX	3P	110	-	14	-	56	14	11	14	4	3

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented
Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-185

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

Spiral Fluted Tap Series for blind hole

S

JIS

PM-SP

Spiral Fluted Taps for Hard-to-Machine Materials



Specification

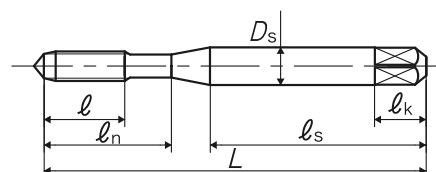


■Spiral fluted tap suitable for tapping hard steels with hardness between 25-45HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and mold steels.

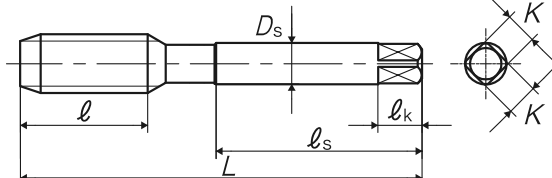
Tapping Speeds depending on Materials

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

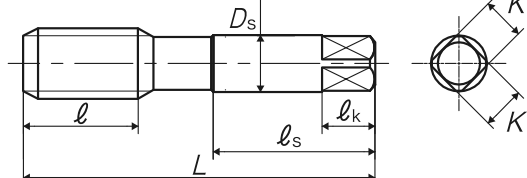
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1D

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M3 × 0.5	P3	SY3.0GRDPB	2.75P	46	9	14	26	4	3.2	6	3	1	¥ 2,020 ※
M4 × 0.7	P3	SY4.0IRDPB	2.75P	52	11	17	29	5	4	7	3	1	¥ 2,020 ※
M5 × 0.8	P3	SY5.0KRDPB	2.75P	60	13	22	33	5.5	4.5	7	3	1	¥ 2,030 ※
M6 × 1	P3	SY6.0MRDPB	2.75P	62	15	26	33	6	4.5	7	3	1	¥ 2,240 ※
M8 × 1.25	P3	SY8.0NRDPB	2.75P	70	19	-	36	6.2	5	8	3	2	¥ 3,130 ※
M10 × 1.5	P3	SY010ORDPB	2.75P	75	23	-	38	7	5.5	8	3	2	¥ 3,970 ※
M10 × 1.25	P3	SY010NRDPB	2.75P	75	23	-	38	7	5.5	8	3	2	¥ 3,970 ※
M12 × 1.75	P3	SY012PRDPB	2.75P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,630 ※
M12 × 1.5	P3	SY012ORDPB	2.75P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,630 ※
M12 × 1.25	P4	SY012NSDPB	2.75P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,630 ※
M14 × 2	P4	SY014QSDPB	2.75P	88	26	-	45	10.5	8	11	3	2	¥ 7,670 ※
M14 × 1.5	P3	SY014ORDPB	2.75P	88	26	-	45	10.5	8	11	3	2	¥ 7,670 ※
M16 × 2	P4	SY016QSDPB	2.75P	95	26	-	48	12.5	10	13	3	2	¥ 10,300 ※
M16 × 1.5	P3	SY016ORDPB	2.75P	95	26	-	48	12.5	10	13	3	2	¥ 10,300 ※
M18 × 2.5	P4	SY018RSDPB	2.75P	100	33	-	51	14	11	14	4	2	¥ 13,900 ※
M18 × 1.5	P4	SY018OSDPB	2.75P	100	33	-	51	14	11	14	4	2	¥ 13,900 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-186

① Spiral Fluted Tap Series for blind hole

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

JIS

PM-SP Spiral Fluted Taps for Nickel Base Alloys

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M20 × 2.5	P4	SY020RSDPB	2.75P	105	33	-	50	15	12	15	4	3	¥ 18,700 ※
M20 × 1.5	P4	SY020OSDPB	2.75P	105	33	-	50	15	12	15	4	3	¥ 18,700 ※
M22 × 2.5	P4	SY022RSDPB	2.75P	115	33	-	55	17	13	16	4	3	¥ 23,900 ※
M22 × 1.5	P4	SY022OSDPB	2.75P	115	33	-	55	17	13	16	4	3	¥ 23,900 ※
M24 × 3	P4	SY024SSDPB	2.75P	120	39	-	55	19	15	18	4	3	¥ 29,900 ※
M24 × 1.5	P4	SY024OSDPB	2.75P	120	39	-	55	19	15	18	4	3	¥ 29,900 ※
M27 × 3	P4	SY027SSDPB	2.75P	130	39	-	60	20	15	18	4	3	¥ 41,800 ※
M27 × 1.5	P4	SY027OSDPB	2.75P	130	39	-	60	20	15	18	4	3	¥ 41,800 ※
M30 × 3.5	P4	SY030TSDPB	2.75P	135	46	-	62	23	17	20	4	3	¥ 53,300 ※
M30 × 1.5	P4	SY030OSDPB	2.75P	135	46	-	62	23	17	20	4	3	¥ 53,300 ※
For Unified Threads													
5/16-18UNC	P3	SYU05ORDPB	2.75P	70	19	-	36	6.2	5	8	3	2	¥ 3,600 ※
5/16-24UNF	P3	SYU05MRDPB	2.75P	70	19	-	36	6.2	5	8	3	2	¥ 3,600 ※
3/8-16UNC	P3	SYU06PRDPB	2.75P	75	23	-	38	7	5.5	8	3	2	¥ 4,610 ※
3/8-24UNF	P3	SYU06MRDPB	2.75P	75	23	-	38	7	5.5	8	3	2	¥ 4,610 ※
7/16-14UNC	P4	SYU07QSDPB	2.75P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,490 ※
7/16-20UNF	P3	SYU07NRDPB	2.75P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,490 ※
1/2-13UNC	P4	SYU08RSDPB	2.75P	88	26	-	45	10.5	8	11	3	2	¥ 6,880 ※
1/2-20UNF	P3	SYU08NRDPB	2.75P	88	26	-	45	10.5	8	11	3	2	¥ 6,880 ※
5/8-11UNC	P4	SYU10USDPB	2.75P	95	26	-	48	12.5	10	13	3	2	¥ 10,300 ※
5/8-18UNF	P3	SYU10ORDPB	2.75P	95	26	-	48	12.5	10	13	3	2	¥ 10,300 ※
3/4-10UNC	P4	SYU12VSDPB	2.75P	105	33	-	50	15	12	15	3	3	¥ 18,700 ※
3/4-16UNF	P4	SYU12PSDPB	2.75P	105	33	-	50	15	12	15	3	3	¥ 18,700 ※
1 -8UNC	P5	SYU16XTDPB	2.75P	125	39	-	58	19	15	18	3	3	¥ 38,900 ※
1 -12UNF	P4	SYU16SSDPB	2.75P	125	39	-	58	19	15	18	3	3	¥ 38,900 ※

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

Spiral Fluted Tap Series for blind hole

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

1

ANSI

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

ANSI

①-188

ANSI

PM-SP

Spiral Fluted Taps for Hard-to-Machine Materials



Specification

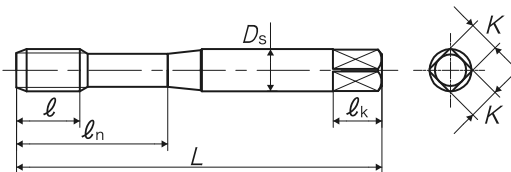


■Spiral fluted tap suitable for tapping hard steels with hardness between 25-45HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and mold steels.

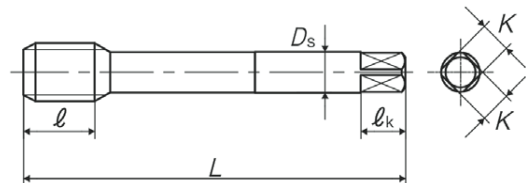
Tapping Speeds depending on Materials

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

TYPE:1



TYPE:2



Segment : 1D

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	TYPE
For Unified Threads											
5/16-18UNC	GH4	SAU05O4DPB	2.75P	2.718	0.669	1.125	0.318	0.238	0.375	3	1
5/16-24UNF	GH4	SAU05M4DPB	2.75P	2.718	0.669	1.125	0.318	0.238	0.375	3	1
3/8-16UNC	GH4	SAU06P4DPB	2.75P	2.937	0.748	1.25	0.381	0.286	0.437	3	1
3/8-24UNF	GH4	SAU06M4DPB	2.75P	2.937	0.748	1.25	0.381	0.286	0.437	3	1
7/16-14UNC	GH6	SAU07Q6DPB	2.75P	3.156	0.866	-	0.323	0.242	0.406	3	2
7/16-20UNF	GH4	SAU07N4DPB	2.75P	3.156	0.866	-	0.323	0.242	0.406	3	2
1/2-13UNC	GH6	SAU08R6DPB	2.75P	3.375	0.984	-	0.367	0.275	0.437	3	2
1/2-20UNF	GH4	SAU08N4DPB	2.75P	3.375	0.984	-	0.367	0.275	0.437	3	2
5/8-11UNC	GH6	SAU10U6DPB	2.75P	3.812	1.083	-	0.48	0.36	0.562	3	2
5/8-18UNF	GH4	SAU10O4DPB	2.75P	3.812	1.083	-	0.48	0.36	0.562	3	2
3/4-10UNC	GH6	SAU12V6DPB	2.75P	4.25	1.201	-	0.59	0.442	0.687	3	2
3/4-16UNF	GH6	SAU12P6DPB	2.75P	4.25	1.201	-	0.59	0.442	0.687	3	2
1 -8UNC	GH7	SAU16X7DPB	2.75P	5.125	1.496	-	0.8	0.6	0.812	3	2
1 -12UNF	GH6	SAU16S6DPB	2.75P	5.125	1.496	-	0.8	0.6	0.812	3	2

• This product is different from JIS products in shape and dimensions, please be careful when using.

Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-189

DIN

PM-SP

Spiral Fluted Taps for Hard-to-Machine Materials



Specification

HSS-P



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

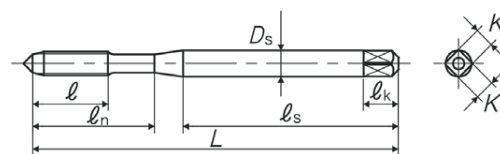
Tapping Speeds depending on Materials

High carbon steels
高炭素鋼
5~10
(m/min)

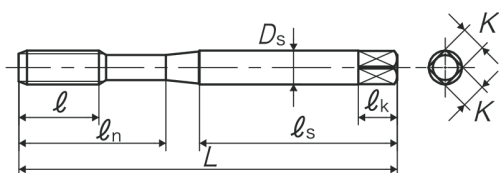
Thermal refined steels
調質鋼
~5
(m/min)
25~35HRC

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

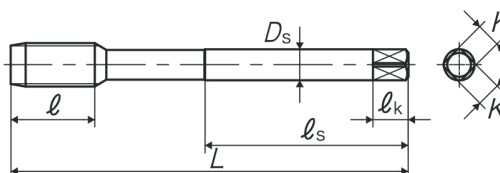
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1D

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
For Metric Threads													
M3 × 0.5	ISO2X	SD3.0GBDPB	2.75P	56	-	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2X	SD4.0IBDPB	2.75P	63	-	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2X	SD5.0KBDPB	2.75P	70	-	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2X	SD6.0MBDPB	2.75P	80	-	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	SD8.0NBDPB	2.75P	90	-	19	35	47	8	6.2	9	3	2
M8 × 1	ISO2X	SM8.0MBDPB	2.75P	90	-	19	-	46	6	4.9	8	3	3
M10 × 1.5	ISO2X	SD010OBDPB	2.75P	100	-	23	39	52.5	10	8	11	3	2
M10 × 1.25	ISO2X	SM010NBDPB	2.75P	100	-	23	-	51	7	5.5	8	3	3
M10 × 1	ISO2X	SM010MBDPB	2.75P	90	-	19	-	46	7	5.5	8	3	3
M12 × 1.75	ISO2X	SG012PBDPB	2.75P	110	-	26	-	56	9	7	10	3	3
M12 × 1.5	ISO2X	SM012OBDPB	2.75P	100	-	21	-	51	9	7	10	3	3
M12 × 1.25	ISO2X	SM012NBDPB	2.75P	100	-	21	-	51	9	7	10	3	3
M14 × 2	ISO2X	SG014QBDPB	2.75P	110	-	26	-	56	11	9	12	3	3
M14 × 1.5	ISO2X	SM014OBDPB	2.75P	100	-	21	-	51	11	9	12	3	3
M16 × 2	ISO2X	SG016QBDPB	2.75P	110	-	26	-	56	12	9	12	3	3
M16 × 1.5	ISO2X	SM016OBDPB	2.75P	100	-	21	-	51	12	9	12	3	3
M18 × 2.5	ISO2X	SG018RBDPB	2.75P	125	-	33	-	64	14	11	14	4	3

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

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)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M18 × 1.5	ISO2X	SM018OBDBP	2.75P	110	-	24	-	56	14	11	14	4	3
M20 × 2.5	ISO2X	SG020RBDPB	2.75P	140	-	33	-	71	16	12	15	4	3
M20 × 1.5	ISO2X	SM020OBDBP	2.75P	125	-	24	-	64	16	12	15	4	3
M22 × 2.5	ISO2X	SG022RBDPB	2.75P	140	-	33	-	71	18	14.5	17	4	3
M22 × 1.5	ISO2X	SM022OBDBP	2.75P	125	-	24	-	64	18	14.5	17	4	3
M24 × 3	ISO2X	SG024SBDPB	2.75P	160	-	37	-	82	18	14.5	17	4	3
M24 × 2	ISO2X	SM024QBDPB	2.75P	140	-	27	-	71	18	14.5	17	4	3
M24 × 1.5	ISO2X	SM024OBDBP	2.75P	140	-	27	-	71	18	14.5	17	4	3
M27 × 3	ISO2X	SG027SBDPB	2.75P	160	-	37	-	82	20	16	19	4	3
M27 × 2	ISO2X	SM027QBDPB	2.75P	140	-	27	-	71	20	16	19	4	3
M27 × 1.5	ISO2X	SM027OBDBP	2.75P	140	-	27	-	71	20	16	19	4	3
M30 × 3.5	ISO2X	SG030TBDPB	2.75P	180	-	44	-	92	22	18	21	4	3
M30 × 2	ISO2X	SM030QBDPB	2.75P	150	-	27	-	77	22	18	21	4	3
M30 × 1.5	ISO2X	SM030OBDBP	2.75P	150	-	27	-	77	22	18	21	4	3
For Unified Threads													
5/16-18UNC	2BX	SDU05OYDPB	2.75P	90	-	19	35	47	8	6.2	9	3	2
5/16-24UNF	2BX	SMU05MYDPB	2.75P	90	-	19	-	46	6	4.9	8	3	3
3/8-16UNC	2BX	SDU06PYDPB	2.75P	100	-	23	39	54.5	9	7	10	3	2
3/8-24UNF	2BX	SMU06MYDPB	2.75P	100	-	23	-	51	7	5.5	8	3	3
7/16-14UNC	2BX	SGU07QYDPB	2.75P	100	-	23	-	51	8	6.2	9	3	3
7/16-20UNF	2BX	SMU07NYDPB	2.75P	100	-	23	-	51	8	6.2	9	3	3
1/2-13UNC	2BX	SGU08RYDPB	2.75P	110	-	26	-	56	9	7	10	3	3
1/2-20UNF	2BX	SMU08NYDPB	2.75P	100	-	21	-	51	9	7	10	3	3
5/8-11UNC	2BX	SGU10UYDPB	2.75P	110	-	26	-	56	12	9	12	3	3
5/8-18UNF	2BX	SMU10OYDPB	2.75P	100	-	21	-	51	12	9	12	3	3
3/4-10UNC	2BX	SGU12VYDPB	2.75P	125	-	33	-	64	14	11	14	3	3
3/4-16UNF	2BX	SMU12PYDPB	2.75P	110	-	24	-	56	14	11	14	3	3
1 -8UNC	2BX	SGU16XYDPB	2.75P	160	-	37	-	82	18	14.5	17	3	3
1 -12UNF	2BX	SMU16SYDPB	2.75P	140	-	27	-	71	18	14.5	17	3	3

1

DIN

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

DIN

①-190

① Spiral Fluted Tap Series for blind hole

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	D _s	K	ℓ _k

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

PH-SP

Spiral Fluted Taps for Hard-to-Machine Materials



Specification

HSS

OX
Oxide



■ Suitable for hard steels of 25-35HRC, such as forgings and thermal refined steels of high carbon steels and alloy steels, and die steels.

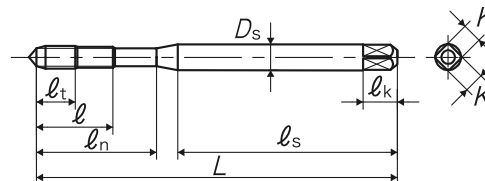
Tapping Speeds depending on Materials

High carbon steels
高炭素鋼
2~7
(m/min)

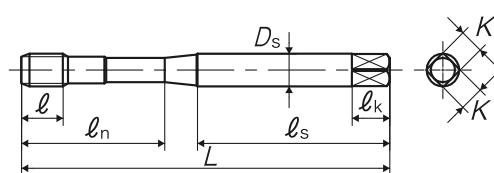
Alloy steels
合金鋼
2~7
(m/min)

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

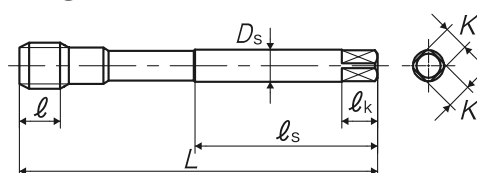
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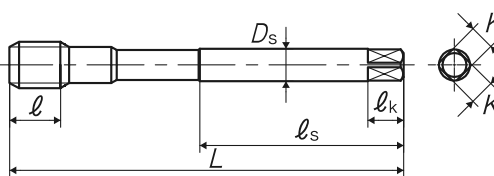
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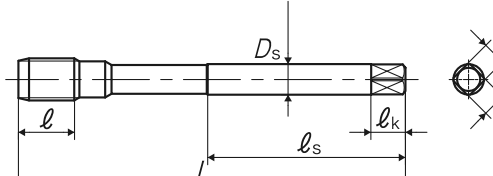
TYPE: 3



TYPE: 4



TYPE: 5



Segment : 1D (G=1H)

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
For Metric Threads													
M3 × 0.5	ISO2	SD3.0GAEEX	3P	56	5	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2	SD4.0IAEEX	3P	63	7	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2	SD5.0KAEEX	3P	70	9	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2	SD6.0MAEEX	3P	80	11	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2	SD8.0NAEEX	3P	90	-	12	35	47	8	6.2	9	3	2
M8 × 1	ISO2	SM8.0MAEEX	3P	90	-	12	-	46	6	4.9	8	3	3
M10 × 1.5	ISO2	SD0100AEEX	3P	100	-	13	39	52.5	10	8	11	3	2
M10 × 1.25	ISO2	SM010NAEEX	3P	100	-	13	-	51	7	5.5	8	3	3
M10 × 1	ISO2	SM010MAEEX	3P	90	-	13	-	46	7	5.5	8	3	3

DIN

①-191

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

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)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M12 × 1.75	ISO2	SG012PAEEX	3P	110	-	15	-	56	9	7	10	4	4
M12 × 1.5	ISO2	SM012OAEEX	3P	100	-	15	-	51	9	7	10	4	3
M12 × 1.25	ISO2	SM012NAEEX	3P	100	-	15	-	51	9	7	10	4	3
M14 × 2	ISO2	SG014QAEEX	3P	110	-	18	-	56	11	9	12	4	4
M14 × 1.5	ISO2	SM014OAEEX	3P	100	-	14	-	51	11	9	12	4	3
M16 × 2	ISO2	SG016QAEEX	3P	110	-	18	-	56	12	9	12	4	4
M16 × 1.5	ISO2	SM016OAEEX	3P	100	-	14	-	51	12	9	12	4	3
M18 × 2.5	ISO2	SG018RAEEX	3P	125	-	20	-	64	14	11	14	4	4
M18 × 1.5	ISO2	SM018OAEEX	3P	110	-	14	-	56	14	11	14	4	3
M20 × 2.5	ISO2	SG020RAEEX	3P	140	-	20	-	71	16	12	15	4	4
M20 × 1.5	ISO2	SM020OAEEX	3P	125	-	14	-	64	16	12	15	4	3
M22 × 2.5	ISO2	SG022RAEEX	3P	140	-	20	-	71	18	14.5	17	5	4
M22 × 1.5	ISO2	SM022OAEEX	3P	125	-	14	-	64	18	14.5	17	5	3
M24 × 3	ISO2	SG024SAEEX	3P	160	-	25	-	82	18	14.5	17	5	4
M24 × 2	ISO2	SM024QAEEX	3P	140	-	18	-	71	18	14.5	17	5	3
M24 × 1.5	ISO2	SM024OAEEX	3P	140	-	18	-	71	18	14.5	17	5	3
M27 × 3	ISO2	SG027SAEEX	3P	160	-	25	-	82	20	16	19	5	4
M27 × 2	ISO2	SM027QAEEX	3P	140	-	20	-	71	20	16	19	5	3
M30 × 3.5	ISO2	SG030TAEEX	3P	180	-	30	-	92	22	18	21	5	4
M30 × 2	ISO2	SM030QAEEX	3P	150	-	20	-	77	22	18	21	5	3
M30 × 1.5	ISO2	SM030OAEEX	3P	150	-	20	-	77	22	18	21	5	3
For G Threads													
G 1/8-28	-	SVG0020EEX	3P	90	-	12	-	46	7	5.5	8	3	5
G 1/4-19	-	SVG0040EEX	3P	100	-	14	-	51	11	9	12	4	5
G 3/8-19	-	SVG0060EEX	3P	100	-	14	-	51	12	9	12	4	5
G 1/2-14	-	SVG0080EEX	3P	125	-	18	-	64	16	12	15	3	5

1

DIN

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

DIN

①-192

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-193

S

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 25-45HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and mold steels.

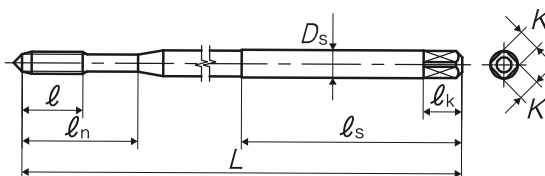
Tapping Speeds depending on Materials

High carbon steels
高炭素鋼
5~10
(m/min)

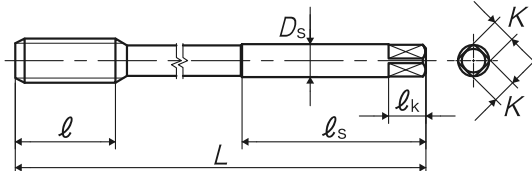
Thermal refined steels
調質鋼
~5
(m/min)
25~35HRC

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

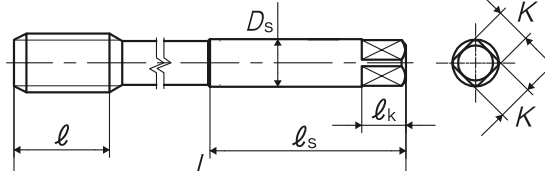
TYPE: 1



TYPE: 2



TYPE: 3



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	MSRP
For Metric Threads													
M3 × 0.5	P3	S43.0GRDPBE	2.75P	100	9	18	40	4	3.2	6	3	1	¥ 5,770 ※
M4 × 0.7	P3	S44.0IRDPBE	2.75P	100	11	21	40	5	4	7	3	1	¥ 5,270 ※
M5 × 0.8	P3	S45.0KRDPBE	2.75P	100	13	25	40	5.5	4.5	7	3	1	¥ 4,620 ※
M6 × 1	P3	S46.0MRDPBE	2.75P	100	15	30	40	6	4.5	7	3	1	¥ 3,950 ※
M6 × 1	P3	S46.0MRDPBG	2.75P	150	15	30	40	6	4.5	7	3	1	¥ 6,970 ※
M8 × 1.25	P3	SY8.0NRDPBE	2.75P	100	19	-	50	6.2	5	8	3	2	¥ 5,110 ※
M8 × 1.25	P3	SY8.0NRDPBG	2.75P	150	19	-	50	6.2	5	8	3	2	¥ 8,690 ※
M10 × 1.5	P3	SY010ORDPBG	2.75P	150	23	-	50	7	5.5	8	3	2	¥ 10,200 ※
M10 × 1.25	P3	SY010NRDPBG	2.75P	150	23	-	50	7	5.5	8	3	2	¥ 10,200 ※
M12 × 1.75	P3	SY012PRDPBG	2.75P	150	26	-	50	8.5	6.5	9	3	2	¥ 12,800 ※
M12 × 1.5	P3	SY012ORDPBG	2.75P	150	26	-	50	8.5	6.5	9	3	2	¥ 12,800 ※
M12 × 1.25	P4	SY012NSDPBG	2.75P	150	26	-	50	8.5	6.5	9	3	2	¥ 12,800 ※
M14 × 2	P4	SY014QSDPBG	2.75P	150	26	-	60	10.5	8	11	3	2	¥ 15,900 ※
M14 × 1.5	P3	SY014ORDPBG	2.75P	150	26	-	60	10.5	8	11	3	2	¥ 15,900 ※
M16 × 2	P4	SY016QSDPBG	2.75P	150	26	-	60	12.5	10	13	3	2	¥ 17,300 ※
M16 × 1.5	P3	SY016ORDPBG	2.75P	150	26	-	60	12.5	10	13	3	2	¥ 17,300 ※
M18 × 2.5	P4	SY018RSDPBG	2.75P	150	33	-	70	14	11	14	4	2	¥ 23,600 ※

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

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

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	TYPE	MSRP
M18 × 1.5	P4	SY018OSDPBG	2.75P	150	33	-	70	14	11	14	4	2	¥ 23,600 ※
M20 × 2.5	P4	SY020RSDPBG	2.75P	150	33	-	70	15	12	15	4	3	¥ 30,300 ※
M20 × 1.5	P4	SY020OSDPBG	2.75P	150	33	-	70	15	12	15	4	3	¥ 30,300 ※
M22 × 2.5	P4	SY022RSDPBK	2.75P	200	33	-	70	17	13	16	4	3	¥ 41,800 ※
M22 × 1.5	P4	SY022OSDPBK	2.75P	200	33	-	70	17	13	16	4	3	¥ 41,800 ※
M24 × 3	P4	SY024SSDPBK	2.75P	200	39	-	80	19	15	18	4	3	¥ 47,000 ※
M24 × 1.5	P4	SY024OSDPBK	2.75P	200	39	-	80	19	15	18	4	3	¥ 47,000 ※
M27 × 3	P4	SY027SSDPBK	2.75P	200	39	-	80	20	15	18	4	3	¥ 52,700 ※
M27 × 1.5	P4	SY027OSDPBK	2.75P	200	39	-	80	20	15	18	4	3	¥ 52,700 ※
M30 × 3.5	P4	SY030TSDPBK	2.75P	200	46	-	80	23	17	20	4	3	¥ 67,600 ※
M30 × 1.5	P4	SY030OSDPBK	2.75P	200	46	-	80	23	17	20	4	3	¥ 67,600 ※

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-194

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-195

S

F-SP

Spiral Fluted Taps for High Speed Tapping



Specification



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)

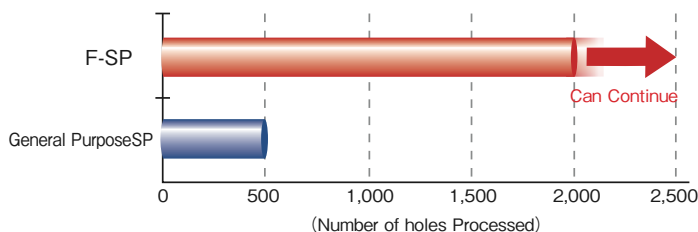
Product Features

- High speed machining is possible with a machine equipped with a fully synchronous feed mechanism.
- The F-SP exhibits excellent chip ejection properties from its unique flute shape and short thread length.
- At low speed, the shape and ejection of the chips can deteriorate, causing problems.

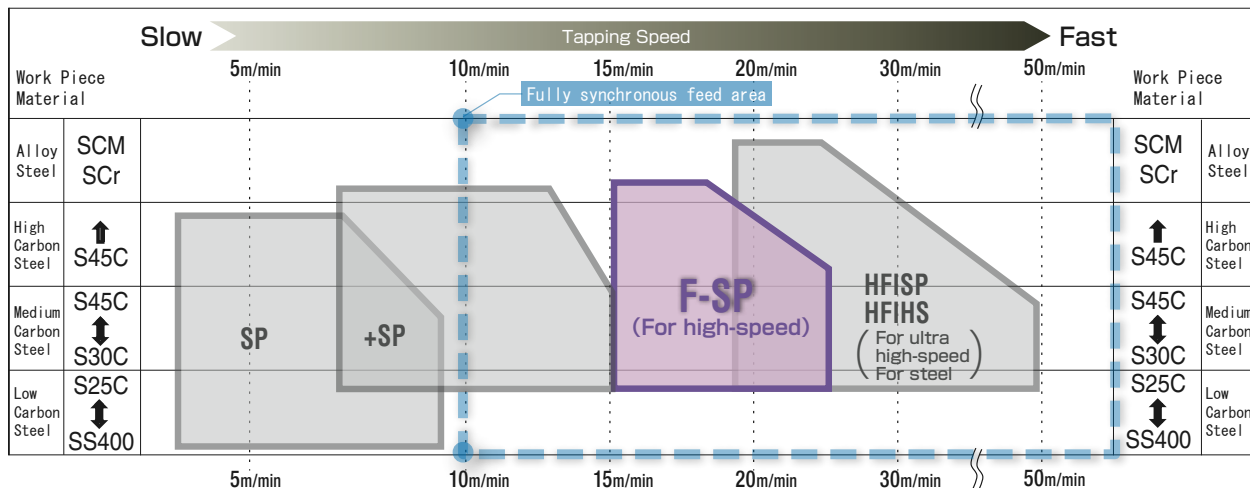
Tapping Data

Tapping Conditions [M6×1]

Work Piece Material	S50C
Bored Hole Shape	Blind hole
Tapping Length	1.5D ~
Machinery Type	M/C
Tapping Direction	Vertical
Feed	Synchronous
Tapping Speed	20m/mim
Cutting Fluid	Water soluble cutting fluid
Pilot hole Processing Method	Drill
Number of Holes Processed	2,000



Speed chart



Speed range by material being cut.

Think threads with
YAMAWA

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	D _s	K	ℓ _k

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

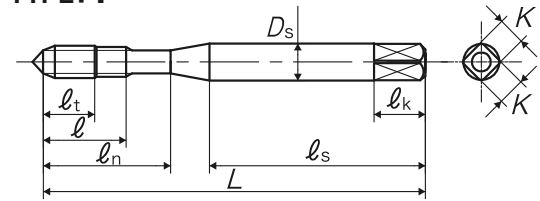
Precision Machinery/
Medical Surgical Instruments

⑫

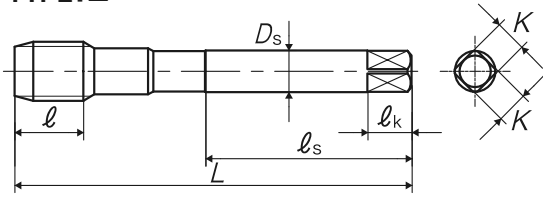
JIS

①-196

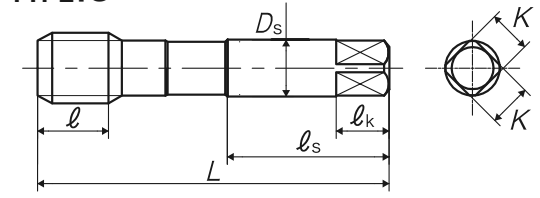
TYPE: 1



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	MSRP
For Metric Threads														
M3 × 0.5	P2	VFSHMQ3.0G	2.5P	46	5	9	14	26	4	3.2	6	3	1	¥ 4,240
M4 × 0.7	P2	VFSHMQ4.0I	2.5P	52	7	11	17	29	5	4	7	3	1	¥ 4,300
M5 × 0.8	P2	VFSHMQ5.0K	2.5P	60	9	13	22	33	5.5	4.5	7	3	1	¥ 4,610
M6 × 1	P2	VFSHMQ6.0M	2.5P	62	11	15	26	33	6	4.5	7	3	1	¥ 4,960
M8 × 1.25	P3	VFSHMR8.0N	3P	70	-	12	-	36	6.2	5	8	3	2	¥ 6,470
M10 × 1.5	P3	VFSHMR010O	3P	75	-	13	-	38	7	5.5	8	3	2	¥ 7,550
M10 × 1.25	P3	VFSHMR010N	3P	75	-	13	-	38	7	5.5	8	3	2	¥ 7,550
M12 × 1.75	P4	VFSHMS012P	3P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 9,560
M12 × 1.5	P3	VFSHMR012O	3P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 9,560
M12 × 1.25	P4	VFSHMS012N	3P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 9,560
M14 × 2	P4	VFSHMS014Q	3P	88	-	18	-	45	10.5	8	11	3	2	¥ 11,800 ※
M14 × 1.5	P3	VFSHMR014O	3P	88	-	14	-	45	10.5	8	11	3	2	¥ 11,800 ※
M16 × 2	P4	VFSHMS016Q	3P	95	-	18	-	48	12.5	10	13	3	2	¥ 15,500 ※
M16 × 1.5	P3	VFSHMR016O	3P	95	-	14	-	48	12.5	10	13	3	2	¥ 15,500 ※
M18 × 2.5	P4	VFSHMS018R	3P	100	-	20	-	51	14	11	14	4	2	¥ 20,700 ※
M18 × 1.5	P4	VFSHMS018O	3P	100	-	14	-	51	14	11	14	4	2	¥ 20,700 ※
M20 × 2.5	P4	VFSHMS020R	3P	105	-	20	-	50	15	12	15	4	3	¥ 26,100 ※
M20 × 1.5	P4	VFSHMS020O	3P	105	-	14	-	50	15	12	15	4	3	¥ 26,100 ※
M22 × 2.5	P4	VFSHMS022R	3P	115	-	20	-	55	17	13	16	4	3	¥ 32,900 ※
M22 × 1.5	P4	VFSHMS022O	3P	115	-	14	-	55	17	13	16	4	3	¥ 32,900 ※
M24 × 3	P4	VFSHMS024S	3P	120	-	25	-	55	19	15	18	4	3	¥ 41,400 ※
M24 × 1.5	P4	VFSHMS024O	3P	120	-	18	-	55	19	15	18	4	3	¥ 41,400 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

① Spiral Fluted Tap Series for blind hole

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

ANSI

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

ZELX FR

Spiral Fluted Taps for High Speed Tapping



Specification

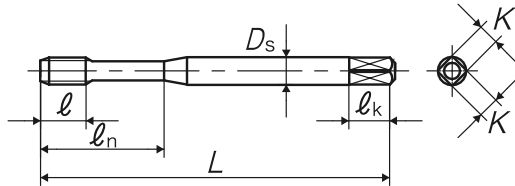


Tapping Speed depending on Materials

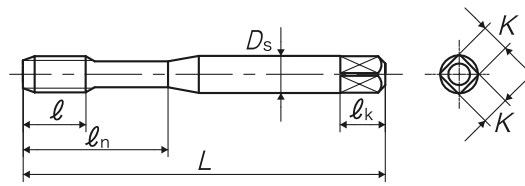
Low carbon steels 低碳素鋼	Medium carbon steels 中炭素鋼
15 ~ 25 (m/min)	15 ~ 25 (m/min)

■ 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.

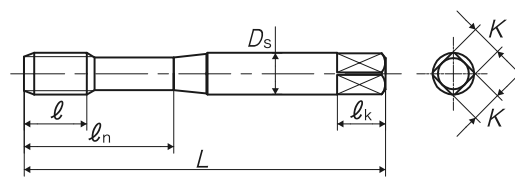
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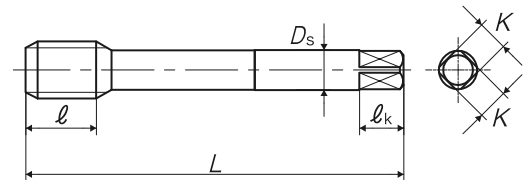
TYPE:2



TYPE:3



TYPE:4



Segment : 1D

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	TYPE
For Unified Threads											
No.4-40UNC	GH2	Y84401	2.5P	1.875	0.236	0.562	0.141	0.11	0.187	3	1
No.5-40UNC	GH2	Y84403	2.5P	1.937	0.236	0.625	0.141	0.11	0.187	3	1
No.6-32UNC	GH3	Y84405	2.5P	2	0.276	0.687	0.141	0.11	0.187	3	1
No.8-32UNC	GH3	Y84407	2.5P	2.125	0.276	0.75	0.168	0.131	0.25	3	1
No.10-24UNC	GH3	Y84409	2.5P	2.375	0.354	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH3	Y84410	2.5P	2.375	0.276	0.875	0.194	0.152	0.25	3	1
1/4-20UNC	GH3	Y84413	2.5P	2.5	0.433	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	Y84414	2.5P	2.5	0.354	1	0.255	0.191	0.312	3	2
5/16-18UNC	GH3	Y84415	2.5P	2.718	0.472	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	Y84416	2.5P	2.718	0.394	1.125	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	Y84417	2.5P	2.937	0.551	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	Y84418	2.5P	2.937	0.394	1.25	0.381	0.286	0.437	3	3
7/16-14UNC	GH3	Y84419	2.5P	3.156	0.591	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH3	Y84420	2.5P	3.156	0.472	-	0.323	0.242	0.406	3	4
1/2-13UNC	GH3	Y84421	2.5P	3.375	0.63	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	Y84422	2.5P	3.375	0.472	-	0.367	0.275	0.437	3	4
5/8-11UNC	GH3	Y84425	2.5P	3.812	0.748	-	0.48	0.36	0.562	3	4

ANSI

①-197

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

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

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	No. of flutes	TYPE
5/8-18UNF	GH3	Y84426	2.5P	3.812	0.512	-	0.48	0.36	0.562	3	4
3/4-10UNC	GH3	Y84427	2.5P	4.25	0.827	-	0.59	0.442	0.687	4	4
3/4-16UNF	GH3	Y84428	2.5P	4.25	0.591	-	0.59	0.442	0.687	4	4

1

ANSI

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

ANSI

①-198

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-199

DIN

F-SP

Spiral Fluted Taps for High Speed Tapping



Specification

HSS

Coating



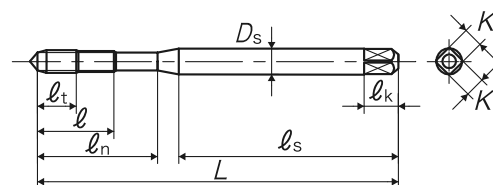
■ Spiral fluted tap applicable for such high speed tapping as 15m/min to 25m/min. Under low tapping speed, poor chip shape and poor chip ejection may occur and cause tapping troubles.

Tapping Speeds depending on Materials

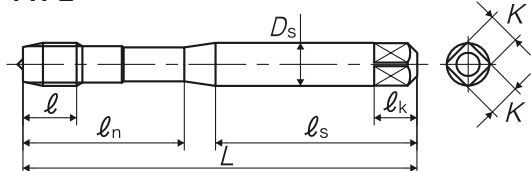
Low carbon steels
低炭素鋼
15 ~ 25
(m/min)

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

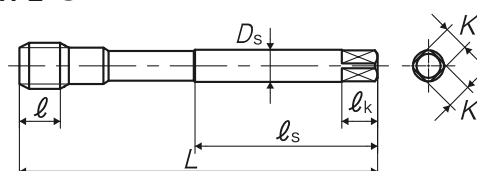
TYPE: 1



TYPE: 2



TYPE: 3



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
For Metric Threads													
M3 × 0.5	ISO2X	SD3.0GBNEV	2.5P	56	5	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2X	SD4.0IBNEV	2.5P	63	7	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2X	SD5.0KBNEV	2.5P	70	9	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2X	SY6.0MBNEV	2.5P	80	11	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	SY8.0NBNEV	2.5P	90	-	12	35	48	8	6.2	9	3	2
M10 × 1.5	ISO2X	SY10.0OBNEV	2.5P	100	-	13	39	53	10	8	11	3	2
M10 × 1.25	ISO2X	SY10.1NBNEV	2.5P	100	-	13	39	53	10	8	11	3	2
M12 × 1.75	ISO2X	SY12.1PBNEV	2.5P	110	-	15	45	56	12	9	12	3	2
M12 × 1.75	ISO2X	SG12.1PBNEV	2.5P	110	-	15	-	56	9	7	10	3	3
M12 × 1.5	ISO2X	SY12.0BNEV	2.5P	110	-	15	45	56	12	9	12	3	2
M12 × 1.5	ISO2X	SM12.0BNEV	2.5P	100	-	15	-	51	9	7	10	3	3
M12 × 1.25	ISO2X	SY12.1NBNEV	2.5P	110	-	15	45	56	12	9	12	3	2
M12 × 1.25	ISO2X	SM12.1NBNEV	2.5P	100	-	15	-	51	9	7	10	3	3

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

Spiral Fluted Tap Series for blind hole

JIS

LS-F-SP

Long Shank Spiral Fluted Taps for High Speed Tapping



Specification

HSS

Coating



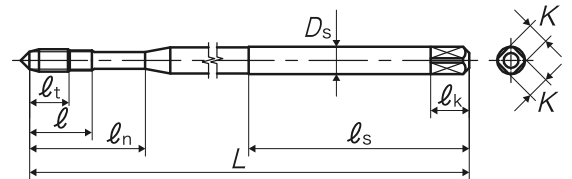
Long Shank spiral fluted Tap applicable for such high speed tapping as 15m/min to 25m/min. Under low tapping speed, poor chip shape and poor chip ejection may occur and cause tapping troubles.

Tapping Speeds depending on Materials

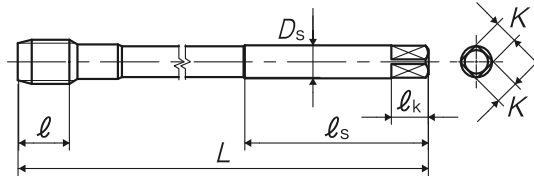
Low carbon steels
低炭素鋼
15 ~ 25
(m/min)

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

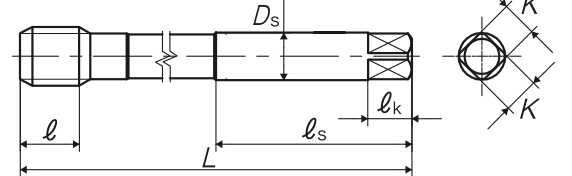
TYPE: 1



TYPE: 2



TYPE: 3



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	MSRP
For Metric Threads														
M3 × 0.5	P2	S43.0GQFEVES	2.5P	100	5	9	18	40	4	3.2	6	3	1	¥ 7,680 ※
M4 × 0.7	P2	S44.0IQFEVES	2.5P	100	7	11	21	40	5	4	7	3	1	¥ 7,300 ※
M5 × 0.8	P2	S45.0KQFEVES	2.5P	100	9	13	25	40	5.5	4.5	7	3	1	¥ 6,620 ※
M6 × 1	P2	S46.0MQFEVES	2.5P	100	11	15	30	40	6	4.5	7	3	1	¥ 5,990 ※
M8 × 1.25	P3	SY8.0NRFEVES	3P	100	-	12	-	50	6.2	5	8	3	2	¥ 7,300 ※
M10 × 1.5	P3	SY010ORFEVES	3P	100	-	13	-	50	7	5.5	8	3	2	¥ 9,510 ※
M10 × 1.5	P3	SY010ORFEVGS	3P	150	-	13	-	50	7	5.5	8	3	2	¥ 14,100 ※
M10 × 1.25	P3	SY010NRFEVES	3P	100	-	13	-	50	7	5.5	8	3	2	¥ 9,510 ※
M10 × 1.25	P3	SY010NRFEVGS	3P	150	-	13	-	50	7	5.5	8	3	2	¥ 14,100 ※
M12 × 1.75	P4	SY012PSFEVGS	3P	150	-	15	-	50	8.5	6.5	9	3	2	¥ 17,200 ※
M12 × 1.5	P3	SY012ORFEVGS	3P	150	-	15	-	50	8.5	6.5	9	3	2	¥ 17,200 ※
M12 × 1.25	P4	SY012NSFEVGS	3P	150	-	15	-	50	8.5	6.5	9	3	2	¥ 17,200 ※
M14 × 2	P4	SY014QSFEVGS	3P	150	-	18	-	60	10.5	8	11	3	2	¥ 21,300 ※
M14 × 1.5	P3	SY014ORFEVGS	3P	150	-	14	-	60	10.5	8	11	3	2	¥ 21,300 ※
M16 × 2	P4	SY016QSFEVGS	3P	150	-	18	-	60	12.5	10	13	3	2	¥ 23,200 ※
M16 × 1.5	P3	SY016ORFEVGS	3P	150	-	14	-	60	12.5	10	13	3	2	¥ 23,200 ※
M18 × 2.5	P4	SY018RSFEVGS	3P	150	-	20	-	70	14	11	14	4	2	¥ 29,200 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

1

JIS

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
Premium Thread Mills

Dies

Center Drills
Centering Tools

Precision Machinery/
Medical Surgical Instruments

JIS

1-200

① Spiral Fluted Tap Series for blind hole

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

JIS

LS-F-SP Long Shank Spiral Fluted Taps for High Speed Tapping

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M18 × 1.5	P4	SY018OSFEVGS	3P	150	-	14	-	70	14	11	14	4	2	¥ 29,200 ※
M20 × 2.5	P4	SY020RSFEVGS	3P	150	-	20	-	70	15	12	15	4	3	¥ 36,200 ※
M20 × 1.5	P4	SY020OSFEVGS	3P	150	-	14	-	70	15	12	15	4	3	¥ 36,200 ※
M22 × 2.5	P4	SY022RSFEVGS	3P	150	-	20	-	70	17	13	16	4	3	¥ 42,000 ※
M22 × 1.5	P4	SY022OSFEVGS	3P	150	-	14	-	70	17	13	16	4	3	¥ 42,000 ※
M24 × 3	P4	SY024SSFVGS	3P	150	-	25	-	80	19	15	18	4	3	¥ 49,200 ※
M24 × 1.5	P4	SY024OSFEVGS	3P	150	-	18	-	80	19	15	18	4	3	¥ 49,200 ※
M27 × 3	P4	SY027SSFVKS	3P	200	-	25	-	80	20	15	18	4	3	¥ 74,800 ※
M30 × 3.5	P5	SY030TTFEVKS	3P	200	-	30	-	80	23	17	20	4	3	¥ 86,800 ※

①

Spiral Fluted Taps
(for blind hole)

②

Spiral Fluted Taps
(for through hole)

③

Spiral Pointed Taps
(for through hole)

④

Hand Taps

⑤

Cemented
Carbide Taps

⑥

Roll Taps

⑦

Special Thread Taps
Simple Inspection Tools

⑧

Pipe Taps

⑨

Thread Mills
Premium Thread Mills

⑩

Dies

⑪

Center Drills
Centering Tools

⑫

Precision Machinery/
Medical Surgical Instruments

JIS

①-201

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

MEMO

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-203

S

HFIHS

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



Specification



Tapping Speeds depending on Materials

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

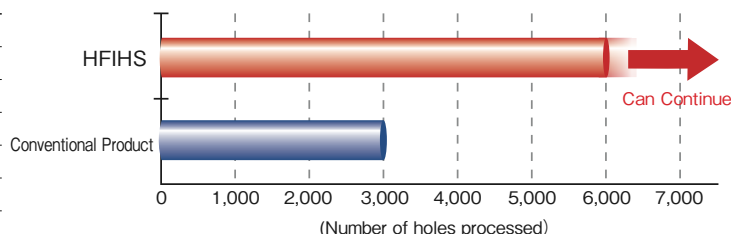
Product Features

- A center coolant through hole tap that can be used at ultra high speed and is compatible with internal lubrication processing.
- The high helix flutes, making it the optimum tap for materials such as carbon steels and alloy steels.

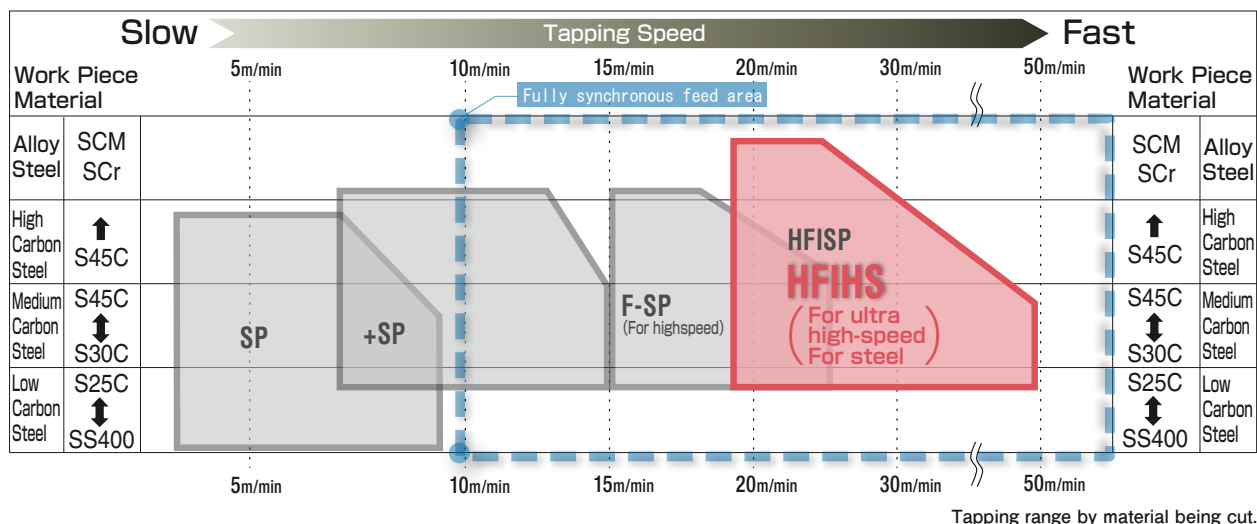
Tapping Data

Tapping conditions [P4 M12 × 1.25]

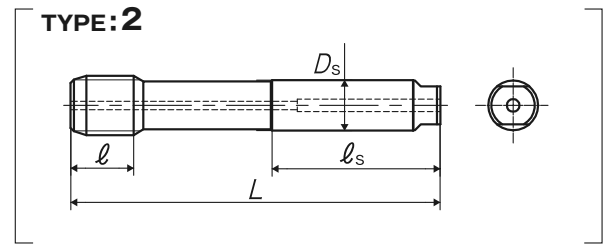
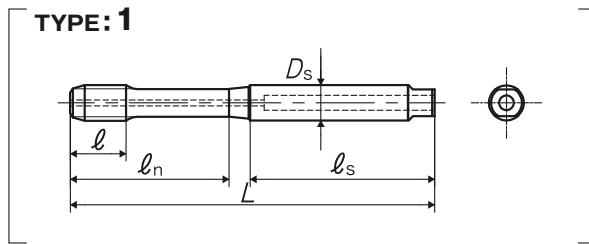
Work Piece Material	FCD450
Bored Hole Shape	Blind hole
Bored Hole Size	φ 10.8
Tapping Length	19mm
Tapping Speed	57m/min
Machinery Type	M/C machining center (vertical type)
Cutting Fluid	Water soluble cutting fluid
Number of Holes Processed	6,000



Speed chart



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



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	MSRP
For Metric Threads													
M6 × 1	P4	HFIHSS6.0M	2.5P	62	11	27	32	6	-	-	3	1	¥ 5,040
M8 × 1.25	P4	HFIHSS8.0N	2.5P	70	12	-	36	8	-	-	3	2	¥ 7,410
M10 × 1.5	P4	HFIHSS010O	2.5P	75	13	-	37	10	-	-	3	2	¥ 9,380
M10 × 1.25	P4	HFIHSS010N	2.5P	75	12	-	37	10	-	-	3	2	¥ 9,380
M12 × 1.75	P4	HFIHSS012P	2.5P	82	15	-	40	12	-	-	3	2	¥ 13,400
M12 × 1.5	P4	HFIHSS012O	2.5P	82	14	-	40	12	-	-	3	2	¥ 13,400
M12 × 1.25	P4	HFIHSS012N	2.5P	82	14	-	40	12	-	-	3	2	¥ 13,400
M14 × 1.5	P4	HFIHSS014O	2.5P	88	14	-	40	12	-	-	3	2	¥ 18,300
M16 × 1.5	P4	HFIHSS016O	2.5P	95	14	-	43	16	-	-	3	2	¥ 24,100
M18 × 1.5	P4	HFIHSS018O	2.5P	100	14	-	45	16	-	-	4	2	¥ 34,200
M20 × 1.5	P5	HFIHST020O	2.5P	105	14	-	45	16	-	-	4	2	¥ 44,600

Note:

- There is no shank square. Use a holder with high holding force like a milling chuck. • The back end of the HFIHS shank has a tongue drive design. If the tool holder only grips on the back end of the HFIHS shank tongue drive, the coolant may leak.

1

JIS

Spiral Fluted Taps
(for blind hole) ①

Spiral Fluted Taps
(for through hole) ②

Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫

JIS
①-204

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-205

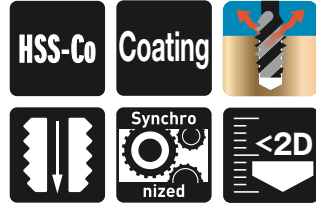
DIN

HFIHS

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



Specification

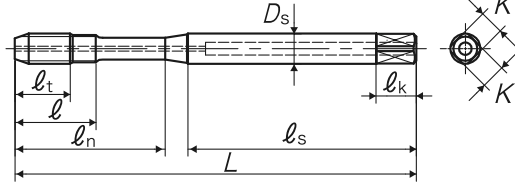


■ Applicable for ultra high speed tapping. Having center through hole geometry to correspond with inner coolant supply system, HFIHS is suitable for carbon steels and alloy steels, blind hole use. Vertical tapping use.

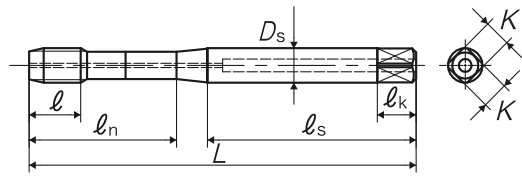
Tapping Speeds depending on Materials

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)

TYPE:1



TYPE:2



Segment : 1D

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
For Metric Threads													
M6 × 1	ISO2X	SY6.0MBEDTZ	2.5P	80	11	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	SY8.0NBEDTZ	2.5P	90	-	12	35	48	8	6.2	9	3	2
M10 × 1.5	ISO2X	SY010OBEDTZ	2.5P	100	-	13	39	53	10	8	11	3	2
M10 × 1.25	ISO2X	SY010NBEDTZ	2.5P	100	-	13	39	53	10	8	11	3	2
M12 × 1.75	ISO2X	SY012PBEDTZ	2.5P	110	-	15	44	57	12	9	12	3	2
M12 × 1.5	ISO2X	SY012OBEDTZ	2.5P	110	-	15	44	57	12	9	12	3	2
M12 × 1.25	ISO2X	SY012NBEDTZ	2.5P	110	-	15	44	57	12	9	12	3	2

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

M E M O

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

S

HFISP

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



Specification



Tapping Speeds depending on Materials

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

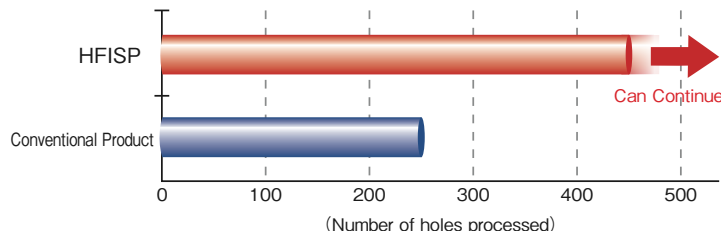
Product Features

- A center coolant through hole tap that can be used at ultra high speed and is compatible with internal lubrication processing.
- The low helix flutes, making it the optimum tap for materials such as carbon steels and alloy steels.

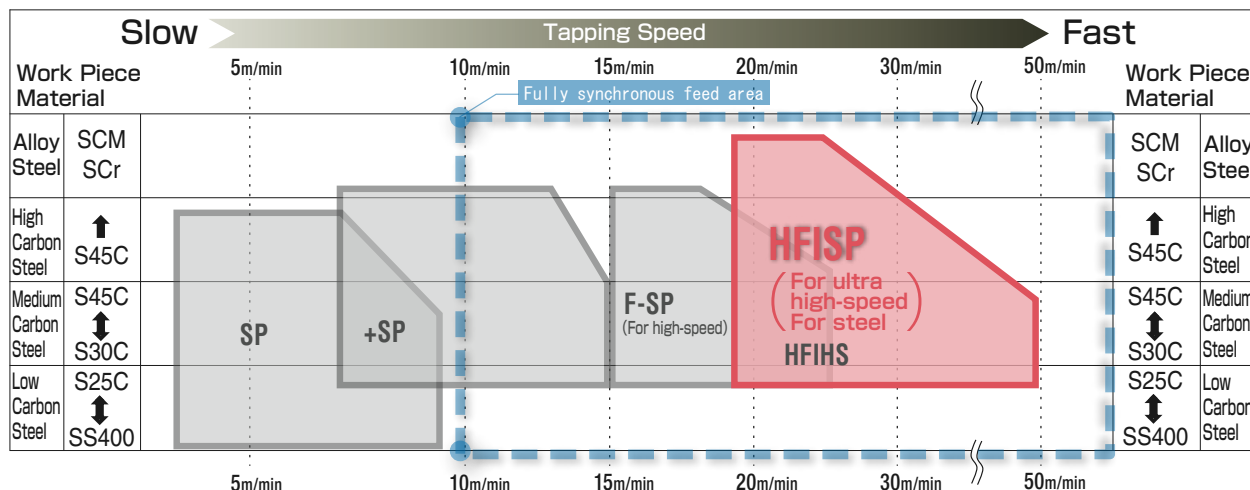
Tapping Data

Tapping Conditions [P4 M10×1.25]

Work Piece Material	S45C
Bored Hole Shape	Blind hole
Bored Hole Size	φ8.8
Tapping Length	18mm
Tapping Speed	126m/min
Machinery Type	M/C machining center (vertical type)
Cutting Fluid	Water soluble cutting fluid
Number of Holes Processed	450



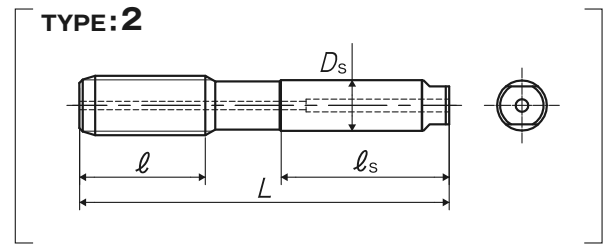
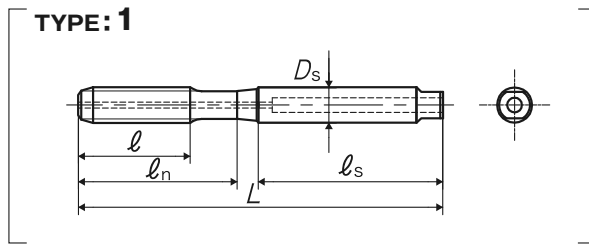
Speed chart



Tapping range by material being cut.

JIS

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



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	MSRP
For Metric Threads													
M6 × 1	P4	HFISPS6.0M	2.5P	62	19	27	32	6	-	-	3	1	¥ 5,040
M8 × 1.25	P4	HFISPS8.0N	2.5P	70	22	-	36	8	-	-	3	2	¥ 7,410
M10 × 1.5	P4	HFISPS010O	2.5P	75	24	-	37	10	-	-	3	2	¥ 9,380
M10 × 1.25	P4	HFISPS010N	2.5P	75	24	-	37	10	-	-	3	2	¥ 9,380
M12 × 1.75	P4	HFISPS012P	2.5P	82	29	-	40	12	-	-	3	2	¥ 13,400
M12 × 1.5	P4	HFISPS012O	2.5P	82	29	-	40	12	-	-	3	2	¥ 13,400
M12 × 1.25	P4	HFISPS012N	2.5P	82	29	-	40	12	-	-	3	2	¥ 13,400
M14 × 1.5	P4	HFISPS014O	2.5P	88	30	-	40	12	-	-	3	2	¥ 18,300
M16 × 1.5	P4	HFISPS016O	2.5P	95	32	-	43	16	-	-	3	2	¥ 24,100
M18 × 1.5	P4	HFISPS018O	2.5P	100	37	-	45	16	-	-	4	2	¥ 34,200
M20 × 1.5	P5	HFISPT020O	2.5P	105	37	-	45	16	-	-	4	2	¥ 44,600

Note:

- There is no shank square. Use a holder with high holding force like a milling chuck. • The back end of the HFAHS shank has a tongue drive design. If the tool holder only grips on the back end of the HFAHS shank tongue drive, the coolant may leak.

1

JIS

Spiral Fluted Taps
(for blind hole) ①

Spiral Fluted Taps
(for through hole) ②

Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫

JIS

①-208

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-209

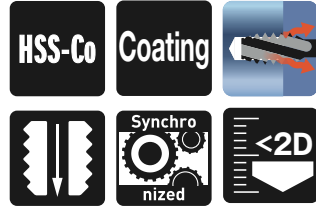
DIN

HFISP

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



Specification

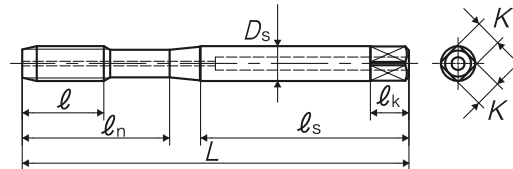


■ Applicable for ultra high speed tapping. Having center through hole geometry to correspond with inner coolant supply system, HFISP is suitable for carbon steels and alloy steels, blind hole use. Effective in horizontal tapping use.

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)

TYPE: 1



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
For Metric Threads												
M6 × 1	ISO2X	SY6.0MBEDTHZ	2.5P	80	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	SY8.0NBEDTHZ	2.5P	90	19	35	48	8	6.2	9	3	1
M10 × 1.5	ISO2X	SY010OBEDTHZ	2.5P	100	23	39	53	10	8	11	3	1
M10 × 1.25	ISO2X	SY010NBEDTHZ	2.5P	100	23	39	53	10	8	11	3	1
M12 × 1.75	ISO2X	SY012PBEDTHZ	2.5P	110	26	44	57	12	9	12	3	1
M12 × 1.5	ISO2X	SY012OBEDTHZ	2.5P	110	26	44	57	12	9	12	3	1
M12 × 1.25	ISO2X	SY012NBEDTHZ	2.5P	110	26	44	57	12	9	12	3	1

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

M E M O

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-211



HFAHS

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



Specification



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 castings 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)

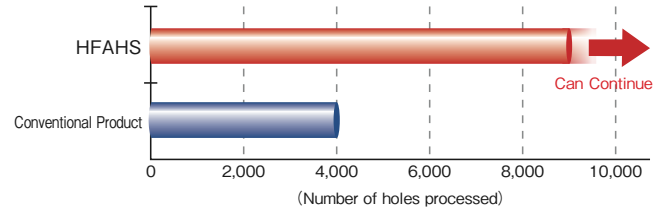
Product Features

- A center coolant through hole tap that can be used at ultra high speed and is compatible with internal lubrication processing.
- The high helix flutes, making it the optimum tap for materials such as aluminum alloy, magnesium alloy and zinc alloy castings.

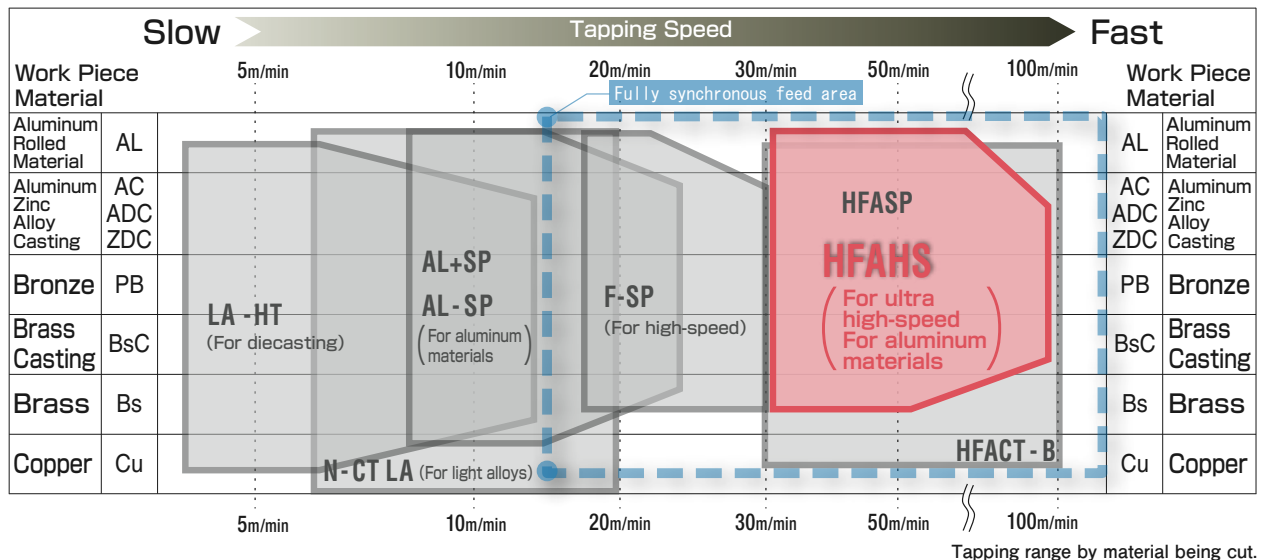
Tapping Data

Tapping Condition [P4 M6×1]

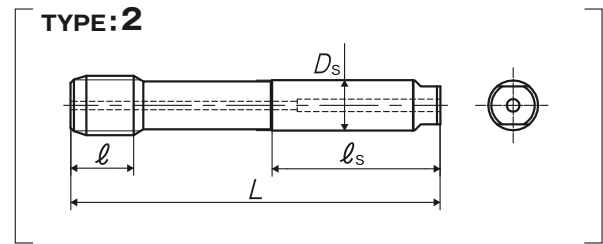
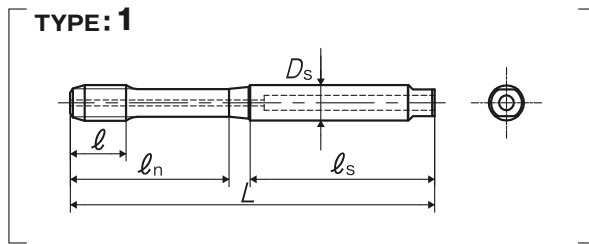
Work Piece Material	ADC12
Bored Hole Shape	Blind hole
Bored Hole Size	φ5.1
Tapping Length	15mm
Tapping Speed	104m/min
Machinery Type	M/C machining center (vertical type)
Cutting Fluid	Water soluble cutting fluid
Nubmer of Holes Processed	9,000



Speed chart



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



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	MSRP
For Metric Threads													
M6 × 1	P4	HFAHSS6.0M	2.5P	62	11	27	32	6	-	-	3	1	¥ 5,040
M8 × 1.25	P4	HFAHSS8.0N	2.5P	70	12	-	36	8	-	-	3	2	¥ 7,410
M10 × 1.5	P4	HFAHSS010O	2.5P	75	13	-	37	10	-	-	3	2	¥ 9,380
M10 × 1.25	P4	HFAHSS010N	2.5P	75	12	-	37	10	-	-	3	2	¥ 9,380
M12 × 1.75	P4	HFAHSS012P	2.5P	82	15	-	40	12	-	-	3	2	¥ 13,400
M12 × 1.5	P4	HFAHSS012O	2.5P	82	14	-	40	12	-	-	3	2	¥ 13,400
M12 × 1.25	P4	HFAHSS012N	2.5P	82	14	-	40	12	-	-	3	2	¥ 13,400
M14 × 1.5	P4	HFAHSS014O	2.5P	88	14	-	40	12	-	-	3	2	¥ 18,300
M16 × 1.5	P4	HFAHSS016O	2.5P	95	14	-	43	16	-	-	3	2	¥ 24,100
M18 × 1.5	P4	HFAHSS018O	2.5P	100	14	-	45	16	-	-	3	2	¥ 34,200
M20 × 1.5	P5	HFAHST020O	2.5P	105	14	-	45	16	-	-	3	2	¥ 44,600

Note:

- There is no shank square. Use a holder with high holding force like a milling chuck. • The back end of the HFAHS shank has a tongue drive design. If the tool holder only grips on the back end of the HFAHS shank tongue drive, the coolant may leak.

1

JIS

Spiral Fluted Taps
(for blind hole) ①

Spiral Fluted Taps
(for through hole) ②

Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫

JIS

①-212

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-213

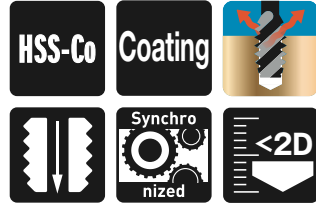
DIN

HFAHS

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



Specification

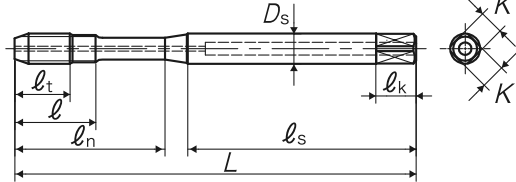


■ Applicable for ultra high speed tapping.
Having center through hole geometry to correspond with inner coolant supply system, HFAHS is suitable for aluminum castings, blind hole use. Vertical tapping use.

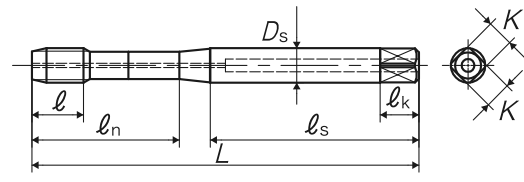
Tapping Speeds depending on Materials

Wrought aluminum アルミ圧延材	Aluminum alloy castings アルミ合金鋳物	Magnesium alloy die castings 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)

TYPE:1



TYPE:2



Segment : 1D

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
For Metric Threads													
M6 × 1	ISO2X	SY6.0MBLDTZ	2.5P	80	11	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	SY8.0NBLDTZ	2.5P	90	-	12	35	48	8	6.2	9	3	2
M10 × 1.5	ISO2X	SY010OBLDTZ	2.5P	100	-	13	39	53	10	8	11	3	2
M10 × 1.25	ISO2X	SY010NBLDTZ	2.5P	100	-	13	39	53	10	8	11	3	2
M12 × 1.75	ISO2X	SY012PBLDTZ	2.5P	110	-	15	44	57	12	9	12	3	2
M12 × 1.5	ISO2X	SY012OBLDTZ	2.5P	110	-	15	44	57	12	9	12	3	2
M12 × 1.25	ISO2X	SY012NBLDTZ	2.5P	110	-	15	44	57	12	9	12	3	2

Think threads with
YAMAWA

・ This product is different from JIS products in shape and dimensions, please be careful when using.

M E M O

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-215



HFASP

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



Specification



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 castings 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)

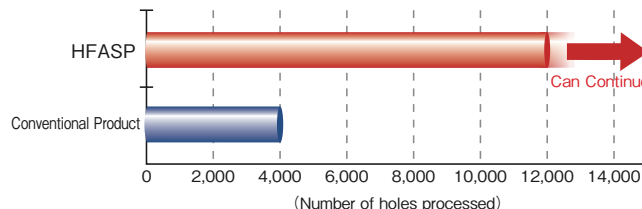
Product Features

- A center coolant through hole tap that can be used at ultra high speed and is compatible with internal lubrication in horizontal processing.
- The low helix flutes, making it the optimum tap for materials such as aluminum alloy, magnesium alloy and zinc alloy castings.

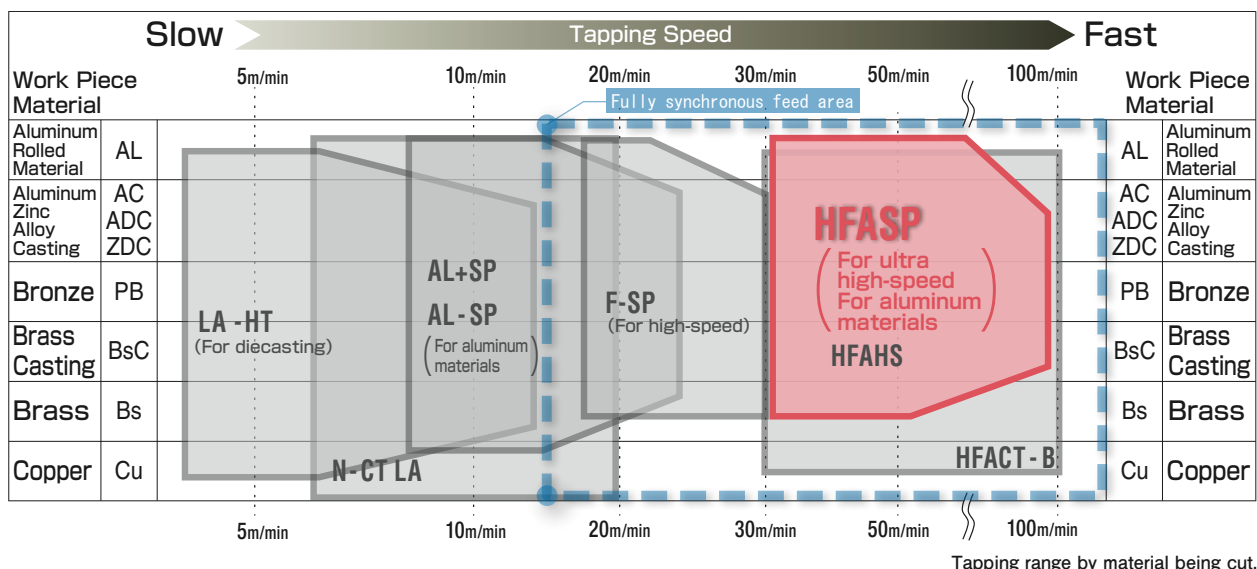
Tapping Data

Tapping Condition [P4 M8×1.25]

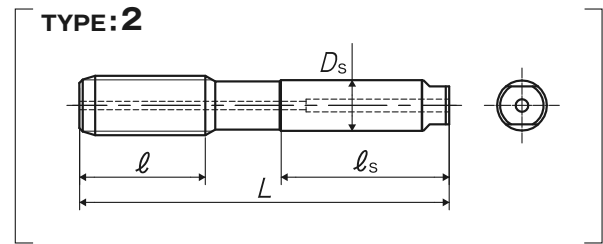
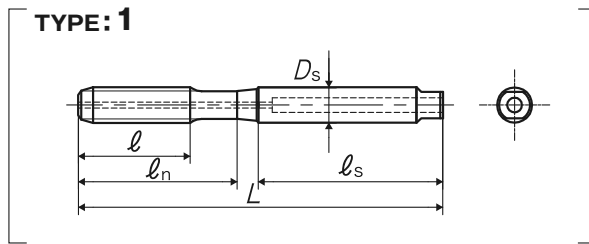
Work Piece Material	ADC12-T5
Bored Hole Shape	Blind hole
Bored Hole Size	φ6.8
Tapping Length	28.5mm
Tapping Speed	100m/min
Machinery Type	M/C machining center (vertical type)
Cutting Fluid	Water soluble cutting fluid
Number of Holes Processed	12,000



Speed chart



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



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	MSRP
For Metric Threads													
M6 × 1	P4	HFASPS6.0M	2.5P	62	19	27	32	6	-	-	3	1	¥ 5,040
M8 × 1.25	P4	HFASPS8.0N	2.5P	70	22	-	36	8	-	-	3	2	¥ 7,410
M10 × 1.5	P4	HFASPS010O	2.5P	75	24	-	37	10	-	-	3	2	¥ 9,380
M10 × 1.25	P4	HFASPS010N	2.5P	75	24	-	37	10	-	-	3	2	¥ 9,380
M12 × 1.75	P4	HFASPS012P	2.5P	82	29	-	40	12	-	-	3	2	¥ 13,400
M12 × 1.5	P4	HFASPS012O	2.5P	82	29	-	40	12	-	-	3	2	¥ 13,400
M12 × 1.25	P4	HFASPS012N	2.5P	82	29	-	40	12	-	-	3	2	¥ 13,400
M14 × 1.5	P4	HFASPS014O	2.5P	88	30	-	40	12	-	-	3	2	¥ 18,300
M16 × 1.5	P4	HFASPS016O	2.5P	95	32	-	43	16	-	-	3	2	¥ 24,100
M18 × 1.5	P4	HFASPS018O	2.5P	100	37	-	45	16	-	-	3	2	¥ 34,200
M20 × 1.5	P5	HFASPT020O	2.5P	105	37	-	45	16	-	-	3	2	¥ 44,600

Remarks:

1. HFACT-P do not have square on its shank, please use holders having strong gripping force, such as milling chucks.
2. Rear end of the shank is to tongue specification. If the portion which contacts the rear end has V saucer, coolant may leak.

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-217

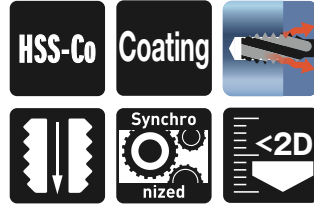
DIN

HFASP

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



Specification

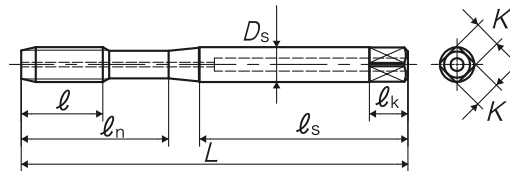


■ Applicable for ultra high speed tapping. Having center through geometry to correspond with inner coolant supply system, HFASP is suitable for aluminum castings, blind hole use. Effective in horizontal tapping use.

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 castings 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)

TYPE: 1



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
For Metric Threads												
M6 × 1	ISO2X	SY6.0MBLDTHZ	2.5P	80	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	SY8.0NBLDTHZ	2.5P	90	19	35	48	8	6.2	9	3	1
M10 × 1.5	ISO2X	SY10.0OBLDTHZ	2.5P	100	23	39	53	10	8	11	3	1
M10 × 1.25	ISO2X	SY010NBLDTHZ	2.5P	100	23	39	53	10	8	11	3	1
M12 × 1.75	ISO2X	SY012PBLDTHZ	2.5P	110	26	44	57	12	9	12	3	1
M12 × 1.5	ISO2X	SY012OBLDTHZ	2.5P	110	26	44	57	12	9	12	3	1
M12 × 1.25	ISO2X	SY012NBLDTHZ	2.5P	110	26	44	57	12	9	12	3	1

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

M E M O

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

S

F

HDISP

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



Specification



Tapping Speeds depending on Materials

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)

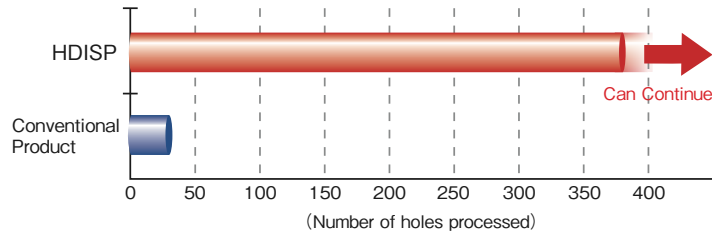
Product Features

- Designed with a through center hole for coolant lubrication, mist lubrication or air blast applications in blind holes.
- The low helix flutes, making it the optimum tap for blind hole tapping on horizontal and vertical machines in materials such as carbon steel and alloy steel.

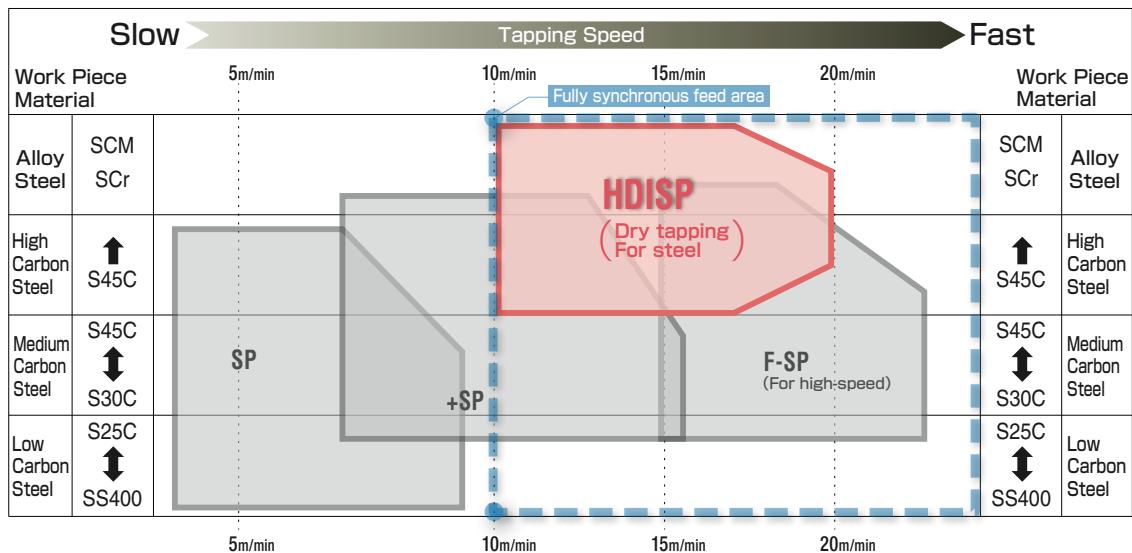
Tapping Data

Tapping Condition [P4 M10×1.25]

Work Piece Material	S50C (18HRC)
Bored Hole Shape	Blind hole
Bored Hole Size	φ8.8
Tapping Length	12mm
Tapping Speed	8m/min
Machinery Type	CNCtapping machine
Cutting Fluid	Dry (Without tapping fluid)
Number of Holes Processed	380



Speed chart



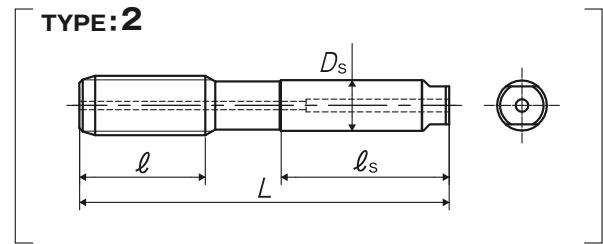
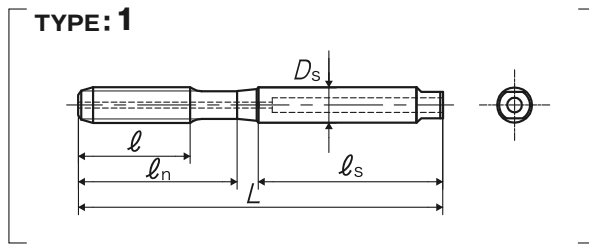
Tapping range by material being cut.

JIS

①-219

Think threads with
YAMAWA

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



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	MSRP
For Metric Threads													
M6 × 1	P4	HDISPS6.0M	2.5P	62	19	27	32	6	-	-	3	1	¥ 5,040
M8 × 1.25	P4	HDISPS8.0N	2.5P	70	22	-	36	8	-	-	3	2	¥ 7,410
M10 × 1.5	P4	HDISPS010O	2.5P	75	24	-	37	10	-	-	3	2	¥ 9,380
M10 × 1.25	P4	HDISPS010N	2.5P	75	24	-	37	10	-	-	3	2	¥ 9,380
M10 × 1	P4	HDISPS010M	2.5P	75	24	-	37	10	-	-	3	2	¥ 11,300
M12 × 1.75	P4	HDISPS012P	2.5P	82	29	-	40	12	-	-	3	2	¥ 13,400
M12 × 1.5	P4	HDISPS012O	2.5P	82	29	-	40	12	-	-	3	2	¥ 13,400
M12 × 1.25	P4	HDISPS012N	2.5P	82	29	-	40	12	-	-	3	2	¥ 13,400
M14 × 1.5	P4	HDISPS014O	2.5P	88	30	-	40	12	-	-	3	2	¥ 18,300
M16 × 1.5	P4	HDISPS016O	2.5P	95	32	-	43	16	-	-	3	2	¥ 24,100
M18 × 1.5	P4	HDISPS018O	2.5P	100	37	-	45	16	-	-	4	2	¥ 34,200
M20 × 1.5	P5	HDISPT020O	2.5P	105	37	-	45	16	-	-	4	2	¥ 44,600

Note:

- There is no shank square. Use a holder with high holding force like a milling chuck. • The back end of the HDISP shank has a tongue drive design. If the tool holder only grips on the back end of the HDISP shank tongue drive, the coolant may leak.

1

JIS

Spiral Fluted Taps
(for blind hole) ①

Spiral Fluted Taps
(for through hole) ②

Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫

JIS

①-220

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-221

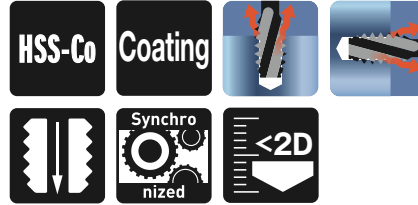
DIN

HDISP

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



Specification



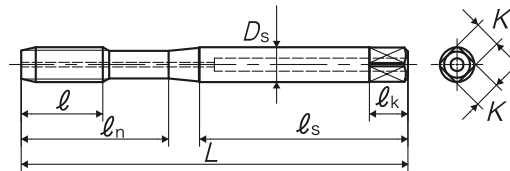
■ Applicable for the tapping under mist or dry condition.

Having center through hole geometry to correspond with inner coolant supply system, HDISP is suitable for carbon steels and alloy steels, blind hole use. For both horizontal and vertical tapping use.

Tapping Speeds depending on Materials

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)

TYPE: 1



Segment : 1D

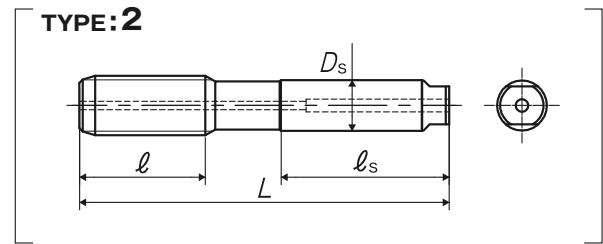
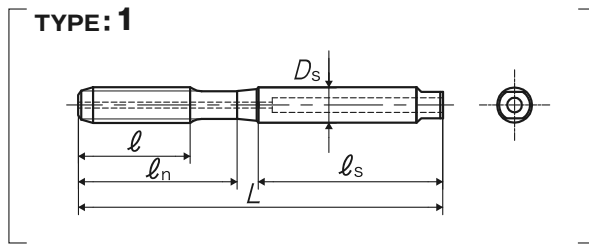
Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	TYPE
For Metric Threads												
M6 × 1	ISO2X	SY6.0MBEDTLZ	2.5P	80	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	SY8.0NBEDTLZ	2.5P	90	19	35	48	8	6.2	9	3	1
M10 × 1.5	ISO2X	SY010OBEDTLZ	2.5P	100	23	39	53	10	8	11	3	1
M10 × 1.25	ISO2X	SY010NBEDTLZ	2.5P	100	23	39	53	10	8	11	3	1
M12 × 1.75	ISO2X	SY012PBEDTLZ	2.5P	110	26	44	57	12	9	12	3	1
M12 × 1.5	ISO2X	SY012OBEDTLZ	2.5P	110	26	44	57	12	9	12	3	1
M12 × 1.25	ISO2X	SY012NBEDTLZ	2.5P	110	26	44	57	12	9	12	3	1

Think threads with
YAMAWA

· This product is different from JIS products in shape and dimensions, please be careful when using.

M E M O

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



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	MSRP
For Metric Threads													
M6 × 1	P4	HDASPS6.0M	2.5P	62	19	27	32	6	-	-	3	1	¥ 5,040
M8 × 1.25	P4	HDASPS8.0N	2.5P	70	22	-	36	8	-	-	3	2	¥ 7,410
M10 × 1.5	P4	HDASPS010O	2.5P	75	24	-	37	10	-	-	3	2	¥ 9,380
M10 × 1.25	P4	HDASPS010N	2.5P	75	24	-	37	10	-	-	3	2	¥ 9,380
M12 × 1.75	P4	HDASPS012P	2.5P	82	29	-	40	12	-	-	3	2	¥ 13,400
M12 × 1.5	P4	HDASPS012O	2.5P	82	29	-	40	12	-	-	3	2	¥ 13,400
M12 × 1.25	P4	HDASPS012N	2.5P	82	29	-	40	12	-	-	3	2	¥ 13,400
M14 × 1.5	P4	HDASPS014O	2.5P	88	30	-	40	12	-	-	3	2	¥ 18,300
M16 × 1.5	P4	HDASPS016O	2.5P	95	32	-	43	16	-	-	3	2	¥ 24,100
M18 × 1.5	P4	HDASPS018O	2.5P	100	37	-	45	16	-	-	3	2	¥ 34,200
M20 × 1.5	P5	HDASPT020O	2.5P	105	37	-	45	16	-	-	3	2	¥ 44,600

Note:

- There is no shank square. Use a holder with high holding force like a milling chuck.
- The back end of the HDASP shank has a tongue drive design. If the tool holder only grips on the back end of the HDASP shank tongue drive, the coolant may leak.

1

JIS

Spiral Fluted Taps
(for blind hole)

1

Spiral Fluted Taps
(for through hole)

2

Spiral Pointed Taps
(for through hole)

3

Hand Taps

4

Cemented
Carbide Taps

5

Roll Taps

6

Special Thread Taps
Simple Inspection Tools

7

Pipe Taps

8

Thread Mills
Premium Thread Mills

9

Dies

10

Center Drills
Centering Tools

11

Precision Machinery/
Medical Surgical Instruments

12

JIS

1-224

① Spiral Fluted Tap Series for blind hole

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

DIN

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection Tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

DIN

①-225

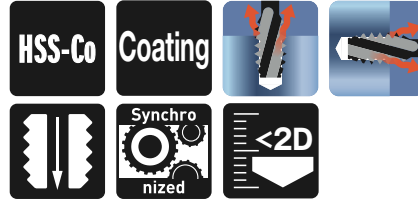
DIN

HDASP

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



Specification



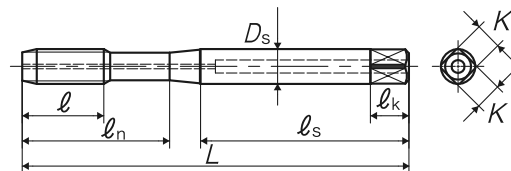
■ Applicable for the tapping under mist or dry condition.

Having center through hole geometry to correspond with inner coolant supply system, HDASP is suitable for aluminum castings, blind hole use. For both horizontal and vertical tapping use.

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 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)

TYPE: 1



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
For Metric Threads												
M6 × 1	ISO2X	SY6.0MBLDTLZ	2.5P	80	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	SY8.0NBLDTLZ	2.5P	90	19	35	48	8	6.2	9	3	1
M10 × 1.5	ISO2X	SY10.0OBLDTLZ	2.5P	100	23	39	53	10	8	11	3	1
M10 × 1.25	ISO2X	SY10.1NBLDTLZ	2.5P	100	23	39	53	10	8	11	3	1
M12 × 1.75	ISO2X	SY12.2PBLDTLZ	2.5P	110	26	44	57	12	9	12	3	1
M12 × 1.5	ISO2X	SY12.0OBLDTLZ	2.5P	110	26	44	57	12	9	12	3	1
M12 × 1.25	ISO2X	SY12.1NBLDTLZ	2.5P	110	26	44	57	12	9	12	3	1

Think threads with
YAMAWA

・ This product is different from JIS products in shape and dimensions, please be careful when using.

M E M O

① Spiral Fluted Tap Series for blind hole

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

JIS

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

JIS

①-227

S

MC-SP

Spiral Fluted Taps with Coolant Through Hole



Specification

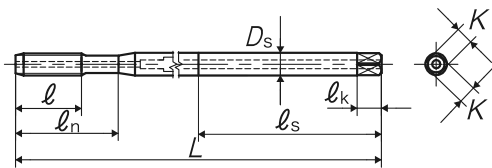


■Coolant through hole (center through type), satisfactory amount of oil is supplied to the exact cutting area. MC-SP spiral fluted tap ensures a long tool life as well as cuts high precision threads with good surface finish.

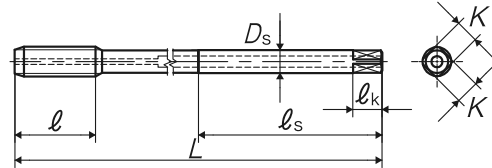
Tapping Speeds depending on Materials

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
5~10 (m/min)	5~10 (m/min)	5~10 (m/min)	5~10 (m/min)

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	MSRP
For Metric Threads													
M6 × 1	P2	MSHQ6.0ML10	2.5P	100	19	28	40	6	4.5	7	3	1	¥ 3,390 ※▲
M6 × 1	P2	MSHQ6.0ML15	2.5P	150	19	28	40	6	4.5	7	3	1	¥ 5,790 ※▲
M8 × 1.25	P2	MSHQ8.0NL10	2.5P	100	22	-	50	6.2	5	8	3	2	¥ 4,390 ※▲
M8 × 1.25	P2	MSHQ8.0NL15	2.5P	150	22	-	50	6.2	5	8	3	2	¥ 7,230 ※▲
M10 × 1.5	P2	MSHQ10.0OL10	2.5P	100	24	-	50	7	5.5	8	3	2	¥ 5,340 ※▲
M10 × 1.5	P2	MSHQ10.0OL15	2.5P	150	24	-	50	7	5.5	8	3	2	¥ 8,440 ※▲
M10 × 1.25	P2	MSHQ10.0NL10	2.5P	100	24	-	50	7	5.5	8	3	2	¥ 5,340 ※▲
M10 × 1.25	P2	MSHQ10.0NL15	2.5P	150	24	-	50	7	5.5	8	3	2	¥ 8,440 ※▲
M12 × 1.75	P2	MSHQ12.0PL10	2.5P	100	29	-	50	8.5	6.5	9	3	2	¥ 6,550 ※▲
M12 × 1.75	P2	MSHQ12.0PL15	2.5P	150	29	-	50	8.5	6.5	9	3	2	¥10,600 ※▲
M12 × 1.75	P2	MSHQ12.0PL20	2.5P	200	29	-	50	8.5	6.5	9	3	2	¥14,200 ※▲
M12 × 1.5	P2	MSHQ12.0OL10	2.5P	100	29	-	50	8.5	6.5	9	3	2	¥ 6,550 ※▲
M12 × 1.5	P2	MSHQ12.0OL15	2.5P	150	29	-	50	8.5	6.5	9	3	2	¥10,600 ※▲
M12 × 1.5	P2	MSHQ12.0OL20	2.5P	200	29	-	50	8.5	6.5	9	3	2	¥14,200 ※▲
M12 × 1.25	P2	MSHQ12.0NL10	2.5P	100	29	-	50	8.5	6.5	9	3	2	¥ 6,550 ※▲
M12 × 1.25	P2	MSHQ12.0NL15	2.5P	150	29	-	50	8.5	6.5	9	3	2	¥10,600 ※▲
M12 × 1.25	P2	MSHQ12.0NL20	2.5P	200	29	-	50	8.5	6.5	9	3	2	¥14,200 ※▲
M14 × 2	P2	MSHQ14.0QL15	2.5P	150	30	-	60	10.5	8	11	3	2	¥13,500 ※▲
M14 × 2	P2	MSHQ14.0QL20	2.5P	200	30	-	60	10.5	8	11	3	2	¥17,300 ※▲
M14 × 1.5	P2	MSHQ14.0OL15	2.5P	150	30	-	60	10.5	8	11	3	2	¥13,500 ※▲
M14 × 1.5	P2	MSHQ14.0OL20	2.5P	200	30	-	60	10.5	8	11	3	2	¥17,300 ※▲
M16 × 2	P2	MSHQ16.0QL15	2.5P	150	32	-	60	12.5	10	13	3	2	¥14,600 ※▲
M16 × 2	P2	MSHQ16.0QL20	2.5P	200	32	-	60	12.5	10	13	3	2	¥18,000 ※▲
M16 × 1.5	P2	MSHQ16.0OL15	2.5P	150	32	-	60	12.5	10	13	3	2	¥14,600 ※▲
M16 × 1.5	P2	MSHQ16.0OL20	2.5P	200	32	-	60	12.5	10	13	3	2	¥18,000 ※▲

Remarks: Products marked with ▲ in the MSRP column are subject to availability.

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

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

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	TYPE	MSRP
M18 × 2.5	P3	MSHR018RL15	2.5P	150	37	-	70	14	11	14	4	2	¥16,800 ※▲
M18 × 2.5	P3	MSHR018RL20	2.5P	200	37	-	70	14	11	14	4	2	¥21,900 ※▲
M18 × 1.5	P2	MSHQ018OL15	2.5P	150	37	-	70	14	11	14	4	2	¥16,800 ※▲
M18 × 1.5	P2	MSHQ018OL20	2.5P	200	37	-	70	14	11	14	4	2	¥21,900 ※▲
M20 × 2.5	P3	MSHR020RL15	2.5P	150	37	-	70	15	12	15	4	2	¥21,400 ※▲
M20 × 2.5	P3	MSHR020RL20	2.5P	200	37	-	70	15	12	15	4	2	¥28,100 ※▲
M20 × 1.5	P3	MSHR020OL15	2.5P	150	37	-	70	15	12	15	4	2	¥21,400 ※▲
M20 × 1.5	P3	MSHR020OL20	2.5P	200	37	-	70	15	12	15	4	2	¥28,100 ※▲
M22 × 2.5	P3	MSHR022RL15	2.5P	150	38	-	70	17	13	16	4	2	¥24,000 ※▲
M22 × 2.5	P3	MSHR022RL20	2.5P	200	38	-	70	17	13	16	4	2	¥31,200 ※▲
M22 × 1.5	P3	MSHR022OL15	2.5P	150	38	-	70	17	13	16	4	2	¥24,000 ※▲
M22 × 1.5	P3	MSHR022OL20	2.5P	200	38	-	70	17	13	16	4	2	¥31,200 ※▲
M24 × 3	P3	MSHR024SL15	2.5P	150	45	-	80	19	15	18	4	2	¥28,100 ※▲
M24 × 3	P3	MSHR024SL20	2.5P	200	45	-	80	19	15	18	4	2	¥35,100 ※▲
M24 × 1.5	P3	MSHR024OL15	2.5P	150	45	-	80	19	15	18	4	2	¥28,100 ※▲
M24 × 1.5	P3	MSHR024OL20	2.5P	200	45	-	80	19	15	18	4	2	¥35,100 ※▲
M27 × 3	P3	MSHR027SL20	2.5P	200	45	-	80	20	15	18	4	2	¥39,600 ※▲
M27 × 3	P3	MSHR027SL25	2.5P	250	45	-	80	20	15	18	4	2	¥53,300 ※▲
M27 × 1.5	P3	MSHR027OL20	2.5P	200	45	-	80	20	15	18	4	2	¥39,600 ※▲
M27 × 1.5	P3	MSHR027OL25	2.5P	250	45	-	80	20	15	18	4	2	¥53,300 ※▲
M30 × 3.5	P4	MSHS030TL20	2.5P	200	48	-	80	23	17	20	4	2	¥50,900 ※▲
M30 × 3.5	P4	MSHS030TL25	2.5P	250	48	-	80	23	17	20	4	2	¥67,300 ※▲
M30 × 1.5	P3	MSHR030OL20	2.5P	200	45	-	80	23	17	20	4	2	¥50,900 ※▲
M30 × 1.5	P3	MSHR030OL25	2.5P	250	45	-	80	23	17	20	4	2	¥67,300 ※▲

Remarks: Products marked with ▲ in the MSRP column are subject to availability.

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills
Premium Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

Precision Machinery/
Medical Surgical Instruments

⑫

JIS

①-228

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

