

JIS • ANSI • DIN

LINE UP

③ SPIRAL POINTED TAP SERIES FOR THROUGH HOLE



	JIS	ANSI	DIN
Z-PRO VUPO	③-3	③-7	③-9
Z-PRO HVPO	③-13	③-20	③-23
Z-PRO HVPO ZP	③-25	③-27	
PO	③-29	③-38	③-43
+PO	③-48		
IPO	③-49	③-51	
PO OX	③-52	③-55	③-60
PO LH	③-64		
PO V	③-66		③-67
LS-PO	③-69		
LS-PO V	③-75		
LS-PO-K	③-76		
SU+PO	③-77		
SU-PO			
ZELX SS PO		③-83	
PO-VA			③-87
PO-VA (Coating)			③-89
LS-SU-S-PO	③-90		
ZELX SS PO 6"		③-92	
S-PO	③-93		
HC+PO	③-95		
HC-PO			
HC-PO OX	③-98		
AL-PO		③-99	
EH-PO	③-101		③-103
ZEN-P	③-105		③-112
ZELX NI PO		③-109	
PM-PO	③-114	③-116	③-118
LS-PM-PO	③-120		
MC-PO	③-122		

Selection chart of taps

Tapping conditions		Machining, in low-speed tapping area									
Product symbol		IPO	PO	LS-PO	LS-PO-K	PO LH	PO OX	Z-PRO HVPO	Z-PRO HVPO ZP	+PO	
Tap material Surface treatment		HSS OX	HSS	HSS	HSS	HSS	HSS OX	HSS OX	HSS OX	HSS	
Name		I series	For general use	Long, for general use	Long neck	For general use For left-hand threads	Oxidized	For steels	For Galvanizing	For general use	
											
Bored Hole Shape											
For Metric Threads		③-50	③-31	③-69	③-76	③-64	③-52	③-15	③-26	③-48	
For Unified Threads			③-35	③-72		③-65	③-53	③-17			
For Whitworth Threads			③-36	③-72		③-65	③-54	③-18			
For Screw Threads used on Sewing Machines			③-37								
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									

[illegible]

③ Spiral Pointed Tap Series for through 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

⑬

JIS

③-3



Z-PRO
VUPO

Z-PRO Coated Spiral Pointed Taps



Specification



Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 10~30 (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 10~30 (m/min)	Stainless steels ステンレス鋼 5~15 (m/min)	Tool steels 工具鋼 5~15 (m/min)	Ductile cast irons 強靱鑄鉄 10~35 (m/min)
				Wrought aluminum アルミ圧延材 10~35 (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

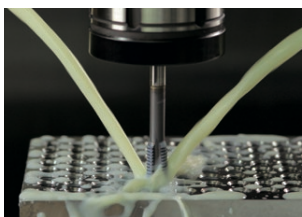
- Durability is improved by premium powder HSS and special coating.
- Chip ejection efficiency is improved and cutting resistance is reduced by the unique cutting edge shape, achieving a good internal thread and long tool life.
- Proper tool projection length is secured, achieving a good supply of water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

Tapping Data

Tapping Conditions [M10×1.5]

Workpiece Material	SUS304
Tapping Speed	10m/min
Machine Type	Machining center, vertical type
Tapping Fluid	Water soluble cutting fluid

Good tapping



The unique cutting edge shape and the longer projection achieve a good supply of water soluble cutting fluid.

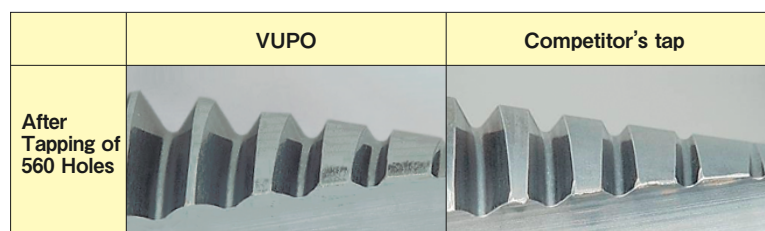
Good internal thread



In tapping of SUS304, good internal thread surface is obtained even in tapping environments that use water soluble cutting fluid.

Tapping Conditions [M10×1.5]

Workpiece Material	S50C
Tapping Length	20mm (2D)
Tapping Speed	20m/min
Machine Type	Machining center, vertical type
Tapping Fluid	Water soluble cutting fluid



- 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.

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

3

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

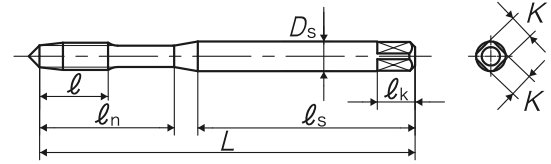
Precision Machinery/
Medical Surgical Instruments

⑫

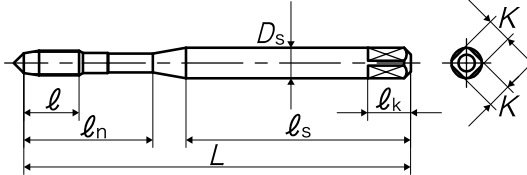
JIS

③-4

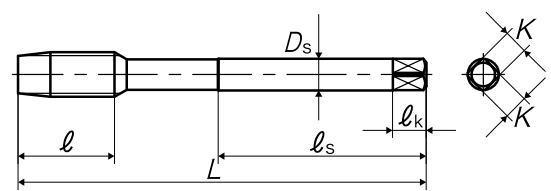
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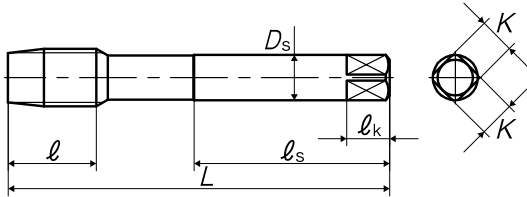
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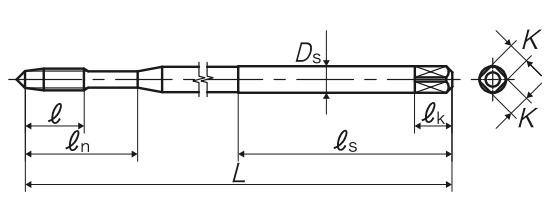
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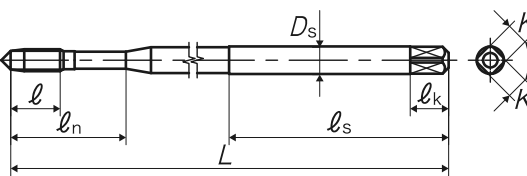
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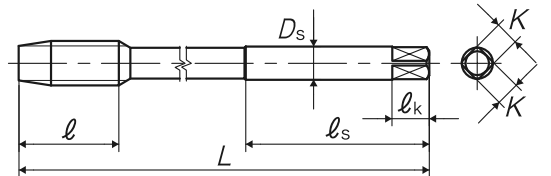
TYPE: 5



TYPE: 6



TYPE: 7



Oversize

Segment : 1F

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M2 × 0.4	P2	1102101021	5P	45	8	15	27	3	2.5	5	2	1	¥ 3,970
M2.2 × 0.45	P2	1102101024	5P	45	9	15	27	3	2.5	5	2	1	¥ 3,730
M2.3 × 0.4	P2	1102101026	5P	45	9	15	27	3	2.5	5	2	1	¥ 3,730
M2.5 × 0.45	P2	1102101029	5P	50	8	15	32	3	2.5	5	2	1	¥ 3,360
M2.6 × 0.45	P2	1102101032	5P	50	8	15	32	3	2.5	5	2	1	¥ 3,360
M3 × 0.5	P2	1102101035	5P	56	9	18	32	4	3.2	6	3	1	¥ 3,050
M3 × 0.5	P3	1102201035	5P	56	9	18	32	4	3.2	6	3	1	¥ 3,050
M3 × 0.5	P4	1102301035	5P	56	9	18	32	4	3.2	6	3	1	¥ 3,050 *
M3 × 0.35	P2	1102101036	5P	56	6.5	18	32	4	3.2	6	3	2	¥ 4,280
M3 × 0.35	P3	1102201036	5P	56	6.5	18	32	4	3.2	6	3	2	¥ 4,280 *
M3 × 0.35	P4	1102301036	5P	56	6.5	18	32	4	3.2	6	3	2	¥ 4,280 *
M4 × 0.7	P3	1102101042	5P	63	13	21	36	5	4	7	3	1	¥ 3,000
M4 × 0.7	P4	1102201042	5P	63	13	21	36	5	4	7	3	1	¥ 3,000
M4 × 0.7	P5	1102301042	5P	63	13	21	36	5	4	7	3	1	¥ 3,000 *
M4 × 0.5	P2	1102101043	5P	63	9	21	36	5	4	7	3	2	¥ 3,740
M4 × 0.5	P3	1102201043	5P	63	9	21	36	5	4	7	3	2	¥ 3,740 *
M4 × 0.5	P4	1102301043	5P	63	9	21	36	5	4	7	3	2	¥ 3,740 *

* = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

③ Spiral Pointed Tap Series for through 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

VUPO Z-PRO Coated Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M5 × 0.8	P3	1102101049	5P	70	14	25	40	5.5	4.5	7	3	1	¥ 3,030
M5 × 0.8	P4	1102201049	5P	70	14	25	40	5.5	4.5	7	3	1	¥ 3,030
M5 × 0.8	P5	1102301049	5P	70	14	25	40	5.5	4.5	7	3	1	¥ 3,030 ※
M5 × 0.5	P2	1102101051	5P	70	9	25	40	5.5	4.5	7	3	2	¥ 3,880
M5 × 0.5	P3	1102201051	5P	70	9	25	40	5.5	4.5	7	3	2	¥ 3,880 ※
M5 × 0.5	P4	1102301051	5P	70	9	25	40	5.5	4.5	7	3	2	¥ 3,880 ※
M6 × 1	P3	1102101055	5P	80	15	30	45	6	4.5	7	3	1	¥ 3,340
M6 × 1	P4	1102201055	5P	80	15	30	45	6	4.5	7	3	1	¥ 3,340
M6 × 1	P5	1102301055	5P	80	15	30	45	6	4.5	7	3	1	¥ 3,340 ※
M6 × 0.75	P2	1102101056	5P	80	15	30	45	6	4.5	7	3	1	¥ 4,400
M6 × 0.75	P3	1102201056	5P	80	15	30	45	6	4.5	7	3	1	¥ 4,400 ※
M6 × 0.75	P4	1102301056	5P	80	15	30	45	6	4.5	7	3	1	¥ 4,400 ※
M6 × 0.5	P2	1102101057	5P	80	9	30	45	6	4.5	7	3	2	¥ 4,400
M6 × 0.5	P3	1102201057	5P	80	9	30	45	6	4.5	7	3	2	¥ 4,400 ※
M6 × 0.5	P4	1102301057	5P	80	9	30	45	6	4.5	7	3	2	¥ 4,400 ※
M8 × 1.25	P3	1102101064	5P	90	19	-	46	6.2	5	8	3	3	¥ 4,400
M8 × 1.25	P4	1102201064	5P	90	19	-	46	6.2	5	8	3	3	¥ 4,400
M8 × 1.25	P5	1102301064	5P	90	19	-	46	6.2	5	8	3	3	¥ 4,400 ※
M8 × 1	P3	1102101065	5P	90	19	-	46	6.2	5	8	3	3	¥ 5,200
M8 × 1	P4	1102201065	5P	90	19	-	46	6.2	5	8	3	3	¥ 5,200 ※
M8 × 1	P5	1102301065	5P	90	19	-	46	6.2	5	8	3	3	¥ 5,200 ※
M10 × 1.5	P3	1102101078	5P	100	23	-	51	7	5.5	8	3	3	¥ 5,560
M10 × 1.5	P4	1102201078	5P	100	23	-	51	7	5.5	8	3	3	¥ 5,560
M10 × 1.5	P5	1102301078	5P	100	23	-	51	7	5.5	8	3	3	¥ 5,560 ※
M10 × 1.25	P3	1102101079	5P	100	23	-	51	7	5.5	8	3	3	¥ 5,560
M10 × 1.25	P4	1102201079	5P	100	23	-	51	7	5.5	8	3	3	¥ 5,560
M10 × 1.25	P5	1102301079	5P	100	23	-	51	7	5.5	8	3	3	¥ 5,560 ※
M10 × 1	P3	1102101080	5P	100	23	-	51	7	5.5	8	3	3	¥ 6,600
M10 × 1	P4	1102201080	5P	100	23	-	51	7	5.5	8	3	3	¥ 6,600 ※
M10 × 1	P5	1102301080	5P	100	23	-	51	7	5.5	8	3	3	¥ 6,600 ※
M12 × 1.75	P4	1102101088	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 7,250
M12 × 1.75	P5	1102201088	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 7,250
M12 × 1.75	P6	1102301088	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 7,250 ※
M12 × 1.5	P3	1102101089	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 7,250
M12 × 1.5	P4	1102201089	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 7,250
M12 × 1.5	P5	1102301089	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 7,250 ※
M12 × 1.25	P4	1102101090	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 7,250
M12 × 1.25	P5	1102201090	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 7,250
M12 × 1.25	P6	1102301090	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 7,250 ※
M14 × 2	P4	1102101100	5P	110	26	-	56	10.5	8	11	3	3	¥ 9,930
M14 × 2	P5	1102201100	5P	110	26	-	56	10.5	8	11	3	3	¥ 9,930
M14 × 2	P6	1102301100	5P	110	26	-	56	10.5	8	11	3	3	¥ 9,930 ※
M14 × 1.5	P3	1102101102	5P	110	26	-	56	10.5	8	11	3	3	¥ 9,930
M14 × 1.5	P4	1102201102	5P	110	26	-	56	10.5	8	11	3	3	¥ 9,930
M14 × 1.5	P5	1102301102	5P	110	26	-	56	10.5	8	11	3	3	¥ 9,930 ※
M16 × 2	P4	1102101114	5P	110	26	-	56	12.5	10	13	3	3	¥ 13,000
M16 × 2	P5	1102201114	5P	110	26	-	56	12.5	10	13	3	3	¥ 13,000
M16 × 2	P6	1102301114	5P	110	26	-	56	12.5	10	13	3	3	¥ 13,000 ※
M16 × 1.5	P3	1102101116	5P	110	26	-	56	12.5	10	13	3	3	¥ 13,000

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

③-5



※ = 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

3

JIS

VUPO Z-PRO Coated Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M16 × 1.5	P4	1102201116	5P	110	26	-	56	12.5	10	13	3	3	¥ 13,000
M16 × 1.5	P5	1102301116	5P	110	26	-	56	12.5	10	13	3	3	¥ 13,000 ※
M18 × 2.5	P5	1102101128	5P	125	33	-	64	14	11	14	3	3	¥ 16,300
M18 × 1.5	P4	1102101130	5P	125	33	-	64	14	11	14	3	3	¥ 16,300
M20 × 2.5	P5	1102101141	5P	140	33	-	71	15	12	15	3	4	¥ 23,600
M20 × 1.5	P4	1102101144	5P	140	33	-	71	15	12	15	3	4	¥ 23,600
M22 × 2.5	P5	1102101156	5P	140	33	-	71	17	13	16	3	4	¥ 28,400
M22 × 1.5	P4	1102101158	5P	140	33	-	71	17	13	16	3	4	¥ 28,400
M24 × 3	P5	1102101167	5P	160	37	-	82	19	15	18	3	4	¥ 34,600
M24 × 1.5	P4	1102101170	5P	160	37	-	82	19	15	18	3	4	¥ 34,600
Long shank, for Metric Threads													
M3 × 0.5	P2	2102101035	5P	100	9	18	32	4	3.2	6	3	5	¥ 5,530
M3 × 0.35	P2	2102101036	5P	100	6.5	18	32	4	3.2	6	3	6	¥ 7,740 ※
M4 × 0.7	P3	2102101042	5P	100	11	21	36	5	4	7	3	5	¥ 5,040
M4 × 0.5	P2	2102101043	5P	100	9	21	36	5	4	7	3	6	¥ 6,560 ※
M5 × 0.8	P3	2102101049	5P	100	13	25	40	5.5	4.5	7	3	5	¥ 4,530
M5 × 0.5	P2	2102101051	5P	100	9	25	40	5.5	4.5	7	3	6	¥ 5,660 ※
M6 × 1	P3	2102101055	5P	100	15	30	45	6	4.5	7	3	5	¥ 4,640
M6 × 0.75	P2	2102101056	5P	100	15	30	45	6	4.5	7	3	5	¥ 5,800
M6 × 0.5	P2	2102101057	5P	100	9	30	45	6	4.5	7	3	6	¥ 5,800 ※
M8 × 1.25	P3	2102101064	5P	150	19	-	46	6.2	5	8	3	7	¥ 7,980
M8 × 1	P3	2102101065	5P	150	19	-	46	6.2	5	8	3	7	¥ 9,180
M10 × 1.5	P3	2102101078	5P	150	23	-	51	7	5.5	8	3	7	¥ 9,340
M10 × 1.25	P3	2102101079	5P	150	23	-	51	7	5.5	8	3	7	¥ 9,340
M10 × 1	P3	2102101080	5P	150	23	-	51	7	5.5	8	3	7	¥ 10,900
M12 × 1.75	P4	2102101088	5P	150	26	-	56	8.5	6.5	9	3	7	¥ 11,200
M12 × 1.5	P3	2102101089	5P	150	26	-	56	8.5	6.5	9	3	7	¥ 11,200
M12 × 1.25	P4	2102101090	5P	150	26	-	56	8.5	6.5	9	3	7	¥ 11,200
M14 × 2	P4	2102101100	5P	150	26	-	56	10.5	8	11	3	7	¥ 15,000
M14 × 1.5	P3	2102101102	5P	150	26	-	56	10.5	8	11	3	7	¥ 15,000
M16 × 2	P4	2102101114	5P	150	26	-	56	12.5	10	13	3	7	¥ 15,700
M16 × 1.5	P3	2102101116	5P	150	26	-	56	12.5	10	13	3	7	¥ 15,700

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

③-6

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

③ Spiral Pointed Tap Series for through 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

Z-PRO
VUPO

Z-PRO Coated Spiral Pointed Taps



Specification



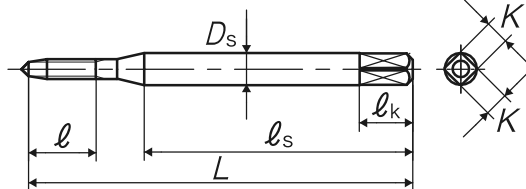
■ Durability is improved by premium powder HSS and special coating.

■ 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.

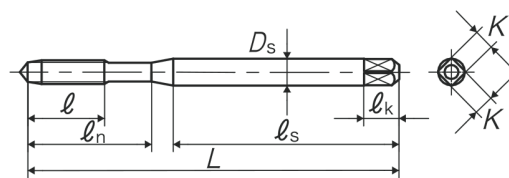
Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 10~30 (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 10~30 (m/min)	Stainless steels ステンレス鋼 5~15 (m/min)	Tool steels 工具鋼 5~15 (m/min)	Ductile cast irons 強靱鑄鉄 10~35 (m/min)
Wrought aluminum アルミ圧延材 10~35 (m/min)	Aluminum alloy castings アルミ合金鑄物 10~35 (m/min)					

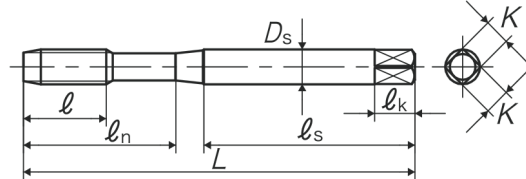
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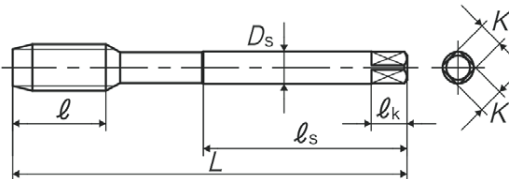
TYPE:2



TYPE:3



TYPE:4



Segment : 1F

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	D4	5102101021	5P	1.772	0.314	-	1.161	0.141	0.110	0.187	2	1
M2.2 × 0.45	D4	5102101024	5P	1.772	0.314	-	1.161	0.141	0.110	0.187	2	1
M2.3 × 0.4	D4	5102101026	5P	1.772	0.314	-	1.161	0.141	0.110	0.187	2	1
M2.5 × 0.45	D4	5102101029	5P	2.205	0.354	0.693	1.280	0.141	0.110	0.187	2	2
M2.6 × 0.45	D4	5102101032	5P	2.205	0.354	0.709	1.280	0.141	0.110	0.187	2	2
M3 × 0.5	D4	5102101035	5P	2.205	0.433	0.736	1.339	0.141	0.110	0.187	3	2
M3 × 0.35	D4	5102101036	5P	2.205	0.256	0.736	1.339	0.141	0.110	0.187	3	2
M4 × 0.7	D5	5102101042	5P	2.480	0.512	0.815	1.535	0.168	0.131	0.25	3	2
M4 × 0.5	D4	5102101043	5P	2.480	0.354	0.815	1.535	0.168	0.131	0.25	3	2
M5 × 0.8	D5	5102101049	5P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	3	2
M5 × 0.5	D4	5102101051	5P	2.756	0.354	0.984	1.654	0.194	0.152	0.25	3	2
M6 × 1	D6	5102101055	5P	3.150	0.591	1.181	1.713	0.255	0.191	0.312	3	2
M6 × 0.75	D6	5102101056	5P	3.150	0.591	1.181	1.713	0.255	0.191	0.312	3	2

ANSI

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

3

ANSI

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M6 × 0.5	D4	5102101057	5P	3.150	0.354	1.181	1.713	0.255	0.191	0.312	3	2
M8 × 1.25	D7	5102101064	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 1	D6	5102101065	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M10 × 1.5	D8	5102101078	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 1.25	D7	5102101079	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 1	D6	5102101080	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M12 × 1.75	D8	5102101088	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
M12 × 1.5	D8	5102101089	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
M12 × 1.25	D7	5102101090	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
M14 × 2	D9	5102101100	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	4
M14 × 1.5	D8	5102101102	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	4
M16 × 2	D9	5102101114	5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	4
M16 × 1.5	D8	5102101116	5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	4
M18 × 2.5	D9	5102101128	5P	4.921	1.299	-	2.520	0.542	0.406	0.625	3	4
M18 × 1.5	D8	5102101130	5P	4.921	0.945	-	2.520	0.542	0.406	0.625	3	4
M20 × 2.5	D9	5102101141	5P	5.512	1.299	-	2.795	0.652	0.489	0.687	3	4
M20 × 1.5	D8	5102101144	5P	5.512	0.945	-	2.795	0.652	0.489	0.687	3	4
M22 × 2.5	D9	5102101156	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	4
M22 × 1.5	D8	5102101158	5P	5.512	0.945	-	2.795	0.697	0.523	0.75	3	4
M24 × 3	D10	5102101167	5P	6.299	1.457	-	3.228	0.760	0.570	0.75	3	4
M24 × 1.5	D8	5102101170	5P	6.299	1.063	-	3.228	0.760	0.570	0.75	3	4
For Unified Threads												
No.5-40UNC	GH2	5102103021	5P	2.205	0.433	0.736	1.339	0.141	0.110	0.187	2	2
No.5-44UNF	GH2	5102103022	5P	2.205	0.433	0.736	1.339	0.141	0.110	0.187	2	2
No.6-32UNC	GH3	5102103023	5P	2.205	0.433	0.748	1.339	0.141	0.110	0.187	2	2
No.6-40UNF	GH2	5102103024	5P	2.205	0.433	0.748	1.339	0.141	0.110	0.187	2	2
No.8-32UNC	GH3	5102103029	5P	2.480	0.512	0.827	1.535	0.168	0.131	0.25	2	2
No.8-36UNF	GH2	5102103030	5P	2.480	0.512	0.827	1.535	0.168	0.131	0.25	2	2
No.10-24UNC	GH3	5102103039	5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	2	2
No.10-32UNF	GH3	5102103041	5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	2	2
No.12-24UNC	GH3	5102103047	5P	3.150	0.591	0.984	1.953	0.220	0.165	0.281	2	2
No.12-28UNF	GH3	5102103048	5P	3.150	0.591	0.984	1.953	0.220	0.165	0.281	2	2
1/4-20UNC	GH5	5102103058	5P	3.150	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	5102103062	5P	3.150	0.591	1.181	1.713	0.255	0.191	0.312	3	2
5/16-18UNC	GH5	5102103071	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	5102103074	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
3/8-16UNC	GH5	5102103082	5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	5102103085	5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
7/16-14UNC	GH5	5102103098	5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	4
7/16-20UNF	GH5	5102103101	5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	4
1/2-13UNC	GH5	5102103111	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
1/2-20UNF	GH5	5102103115	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	4
9/16-12UNC	GH5	5102103126	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	4
9/16-18UNF	GH5	5102103129	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	4
5/8-11UNC	GH5	5102103138	5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	4
5/8-18UNF	GH5	5102103142	5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	4
3/4-10UNC	GH5	5102103161	5P	4.921	1.299	-	2.520	0.590	0.442	0.687	3	4
3/4-16UNF	GH5	5102103164	5P	4.921	1.299	-	2.520	0.590	0.442	0.687	3	4
7/8-9UNC	GH6	5102103181	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	4
7/8-14UNF	GH6	5102103184	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	4

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

③-8

 Think threads with
YAMAWA

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

③ Spiral Pointed Tap Series for through 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

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

Z-PRO
VUPO

Z-PRO Coated Spiral Pointed Taps



Specification

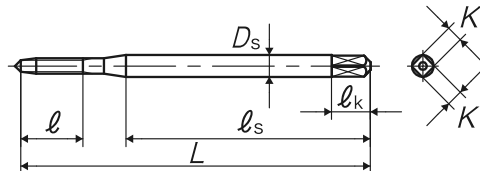


Tapping Speeds depending on Materials

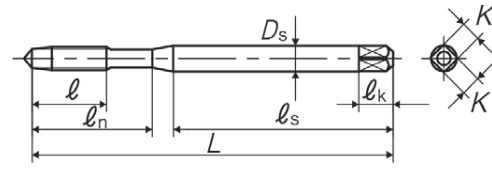
Low carbon steels 低炭素鋼 10~30 (m/min)	Medium carbon steels 中炭素鋼 10~30 (m/min)	High carbon steels 高炭素鋼 10~30 (m/min)	Alloy steels 合金鋼 10~30 (m/min)	Stainless steels ステンレス鋼 5~15 (m/min)	Tool steels 工具鋼 5~15 (m/min)	Ductile cast irons 強靱鑄鉄 10~35 (m/min)
Wrought aluminum アルミ圧延材 10~35 (m/min)	Aluminum alloy castings アルミ合金鋳物 10~35 (m/min)					

- 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.

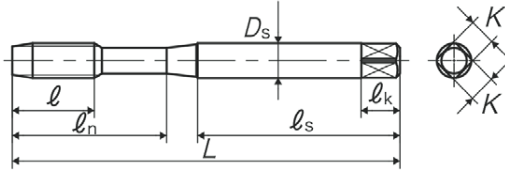
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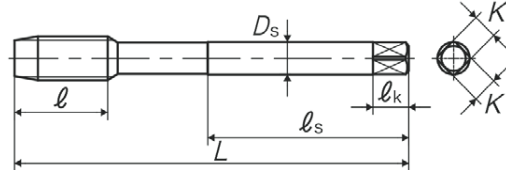
TYPE: 2



TYPE: 3



TYPE: 4



Segment : 1F

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE
For Metric Threads												
M2 × 0.4	ISO2X	3102101021	5P	45	8	-	32	2.8	2.1	5	2	1
M2.2 × 0.45	ISO2X	3102101024	5P	45	9	-	32	2.8	2.1	5	2	1
M2.3 × 0.4	ISO2X	3102101026	5P	45	9	-	32	2.8	2.1	5	2	1
M2.5 × 0.45	ISO2X	3102101029	5P	50	8	15	33	2.8	2.1	5	2	2
M2.6 × 0.45	ISO2X	3102101032	5P	50	8	15	33	2.8	2.1	5	2	2
M3 × 0.5	ISO2X	3102101035	5P	56	9	18	34	3.5	2.7	6	3	2
M3 × 0.5	ISO3X	3102201035	5P	56	9	18	34	3.5	2.7	6	3	2
M3 × 0.5	7GX	3102301035	5P	56	9	18	34	3.5	2.7	6	3	2
M3 × 0.5	ISO2X+100	3102501035	5P	56	9	18	34	3.5	2.7	6	3	2
M3 × 0.35	ISO2X	3102101036	5P	56	6.5	18	34	3.5	2.7	6	3	2
M4 × 0.7	ISO2X	3102101042	5P	63	13	21	38	4.5	3.4	6	3	2
M4 × 0.7	ISO3X	3102201042	5P	63	13	21	38	4.5	3.4	6	3	2
M4 × 0.7	7GX	3102301042	5P	63	13	21	38	4.5	3.4	6	3	2
M4 × 0.7	ISO2X+100	3102501042	5P	63	13	21	38	4.5	3.4	6	3	2

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

3

DIN

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M4 × 0.5	ISO2X	3102101043	5P	63	9	21	38	4.5	3.4	6	3	2
M5 × 0.8	ISO2X	3102101049	5P	70	14	25	39	6	4.9	8	3	2
M5 × 0.8	ISO3X	3102201049	5P	70	14	25	39	6	4.9	8	3	2
M5 × 0.8	7GX	3102301049	5P	70	14	25	39	6	4.9	8	3	2
M5 × 0.8	ISO2X+100	3102501049	5P	70	14	25	39	6	4.9	8	3	2
M5 × 0.5	ISO2X	3102101051	5P	70	9	25	39	6	4.9	8	3	2
M6 × 1	ISO2X	3102101055	5P	80	15	30	45	6	4.9	8	3	2
M6 × 1	ISO3X	3102201055	5P	80	15	30	45	6	4.9	8	3	2
M6 × 1	7GX	3102301055	5P	80	15	30	45	6	4.9	8	3	2
M6 × 1	ISO2X+100	3102501055	5P	80	15	30	45	6	4.9	8	3	2
M6 × 0.75	ISO2X	3102101056	5P	80	15	30	45	6	4.9	8	3	2
M6 × 0.5	ISO2X	3102101057	5P	80	9	30	45	6	4.9	8	3	2
M8 × 1.25	ISO2X	3102101064	5P	90	19	35	47	8	6.2	9	3	3
M8 × 1.25	ISO3X	3102201064	5P	90	19	35	47	8	6.2	9	3	3
M8 × 1.25	7GX	3102301064	5P	90	19	35	47	8	6.2	9	3	3
M8 × 1.25	ISO2X+100	3102501064	5P	90	19	35	47	8	6.2	9	3	3
M8 × 1	ISO2X	3102101065	5P	90	19	-	46	6	4.9	8	3	4
M10 × 1.5	ISO2X	3102101078	5P	100	23	39	52.5	10	8	11	3	3
M10 × 1.5	ISO3X	3102201078	5P	100	23	39	52.5	10	8	11	3	3
M10 × 1.5	7GX	3102301078	5P	100	23	39	52.5	10	8	11	3	3
M10 × 1.5	ISO2X+100	3102501078	5P	100	23	39	52.5	10	8	11	3	3
M10 × 1.25	ISO2X	3102101079	5P	100	23	-	51	7	5.5	8	3	4
M10 × 1	ISO2X	3102101080	5P	90	19	-	46	7	5.5	8	3	4
M12 × 1.75	ISO2X	3102101088	5P	110	26	-	56	9	7	10	3	4
M12 × 1.75	ISO3X	3102201088	5P	110	26	-	56	9	7	10	3	4
M12 × 1.75	7GX	3102301088	5P	110	26	-	56	9	7	10	3	4
M12 × 1.75	ISO2X+100	3102501088	5P	110	26	-	56	9	7	10	3	4
M12 × 1.5	ISO2X	3102101089	5P	100	21	-	51	9	7	10	3	4
M12 × 1.25	ISO2X	3102101090	5P	100	21	-	51	9	7	10	3	4
M14 × 2	ISO2X	3102101100	5P	110	26	-	56	11	9	12	3	4
M14 × 2	ISO3X	3102201100	5P	110	26	-	56	11	9	12	3	4
M14 × 2	7GX	3102301100	5P	110	26	-	56	11	9	12	3	4
M14 × 2	ISO2X+100	3102501100	5P	110	26	-	56	11	9	12	3	4
M14 × 1.5	ISO2X	3102101102	5P	100	21	-	51	11	9	12	3	4
M16 × 2	ISO2X	3102101114	5P	110	26	-	56	12	9	12	3	4
M16 × 2	ISO3X	3102201114	5P	110	26	-	56	12	9	12	3	4
M16 × 2	7GX	3102301114	5P	110	26	-	56	12	9	12	3	4
M16 × 2	ISO2X+100	3102501114	5P	110	26	-	56	12	9	12	3	4
M16 × 1.5	ISO2X	3102101116	5P	100	21	-	51	12	9	12	3	4
M18 × 2.5	ISO2X	3102101128	5P	125	33	-	64	14	11	14	3	4
M18 × 1.5	ISO2X	3102101130	5P	110	24	-	56	14	11	14	3	4
M20 × 2.5	ISO2X	3102101141	5P	140	33	-	71	16	12	15	3	4
M20 × 1.5	ISO2X	3102101144	5P	125	24	-	64	16	12	15	3	4
M22 × 2.5	ISO2X	3102101156	5P	140	33	-	71	18	14.5	17	3	4
M22 × 1.5	ISO2X	3102101158	5P	125	24	-	64	18	14.5	17	3	4
M24 × 3	ISO2X	3102101167	5P	160	37	-	82	18	14.5	17	3	4
M24 × 1.5	ISO2X	3102101170	5P	140	27	-	71	18	14.5	17	3	4
For Unified Threads												
No.5-40UNC	2BX	3102103021	5P	56	11	18	34	3.5	2.7	6	2	2
No.5-44UNF	2BX	3102103022	5P	56	11	18	34	3.5	2.7	6	2	2

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

③-10

③ Spiral Pointed Tap Series for through 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

VUPO Z-PRO Coated Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
No.6-32UNC	2BX	3102103023	5P	56	11	19	32	4	3	6	2	2
No.6-40UNF	2BX	3102103024	5P	56	11	19	32	4	3	6	2	2
No.8-32UNC	2BX	3102103029	5P	63	13	21	38	4.5	3.4	6	2	2
No.8-36UNF	2BX	3102103030	5P	63	13	21	38	4.5	3.4	6	2	2
No.10-24UNC	2BX	3102103039	5P	70	14	24	39	6	4.9	8	2	2
No.10-32UNF	2BX	3102103041	5P	70	14	24	39	6	4.9	8	2	2
No.12-24UNC	2BX	3102103047	5P	80	15	28	45	6	4.9	8	2	2
No.12-28UNF	2BX	3102103048	5P	80	15	28	45	6	4.9	8	2	2
1/4-20UNC	2BX	3102103058	5P	80	15	30	42	7	5.5	8	3	2
1/4-28UNF	2BX	3102103062	5P	80	15	30	42	7	5.5	8	3	2
5/16-18UNC	2BX	3102103071	5P	90	19	35	47	8	6.2	9	3	3
5/16-24UNF	2BX	3102103074	5P	90	19	-	46	6	4.9	8	3	4
3/8-16UNC	2BX	3102103082	5P	100	23	39	54	9	7	10	3	3
3/8-24UNF	2BX	3102103085	5P	100	23	-	51	7	5.5	8	3	4
7/16-14UNC	2BX	3102103098	5P	100	23	-	51	8	6.2	9	3	4
7/16-20UNF	2BX	3102103101	5P	100	23	-	51	8	6.2	9	3	4
1/2-13UNC	2BX	3102103111	5P	110	26	-	56	9	7	10	3	4
1/2-20UNF	2BX	3102103115	5P	100	21	-	51	9	7	10	3	4
9/16-12UNC	2BX	3102103126	5P	110	26	-	56	11	9	12	3	4
9/16-18UNF	2BX	3102103129	5P	100	21	-	51	11	9	12	3	4
5/8-11UNC	2BX	3102103138	5P	110	26	-	56	12	9	12	3	4
5/8-18UNF	2BX	3102103142	5P	100	21	-	51	12	9	12	3	4
3/4-10UNC	2BX	3102103161	5P	125	33	-	64	14	11	14	3	4
3/4-16UNF	2BX	3102103164	5P	110	24	-	56	14	11	14	3	4
7/8-9UNC	2BX	3102103181	5P	140	33	-	71	18	14.5	17	3	4
7/8-14UNF	2BX	3102103184	5P	125	24	-	64	18	14.5	17	3	4

① Spiral Fluted Taps
(for blind hole)

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(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

③-11

Think threads with
YAMAWA

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

M E M O

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

③ Spiral Pointed Tap Series for through 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
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Medical Surgical Instruments

JIS

③-13



Z-PRO
HVPO

Z-PRO Hybrid Value Spiral Pointed 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)	3~10 (m/min) (25~35HRC)	~5 (m/min)	3~12 (m/min)

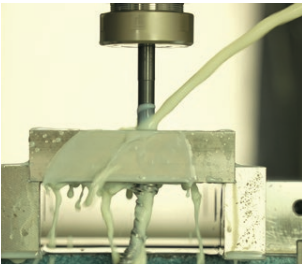
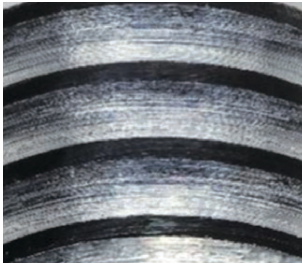
Product Features

- Chip ejection efficiency is improved and cutting resistance is reduced by the unique cutting edge shape, achieving a good internal thread and improved durability.
- Proper tool projection length is secured, achieving a good supply of tapping fluid.

Tapping Data

Tapping Conditions [M12×1.75]

Workpiece Material	SS400
Tapping Speed	10m/min
Tapping Length	24mm
Machine Type	Machining center (Vertical)
Tapping Fluid	Water soluble cutting fluid

Good tapping	Good internal thread	Uniform chips' shape
		
The unique cutting edge shape and the longer projection achieve a good supply of cutting fluid.	In tapping of SUS400, good internal thread surface is obtained even in tapping environments that use water soluble cutting fluid.	

■ Advantages of using HVPO

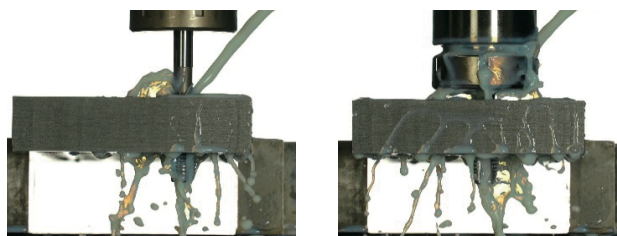
Clearance between the holder and the workpiece is secured, achieving a good supply of cutting fluid.

*Longer tap life + less heat generation during tapping.

◎ Comparison photo of "HVPO" (Z-PRO series product) and "PO" (JIS standard product)

Z-PRO HVPO

PO (JIS standard length)



M12×1.75

Tapping Length : 1.5D (Tapping Length)
Holding length : 31mm

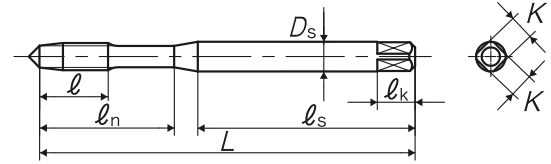
Think threads with
YAMAWA

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

3

JIS

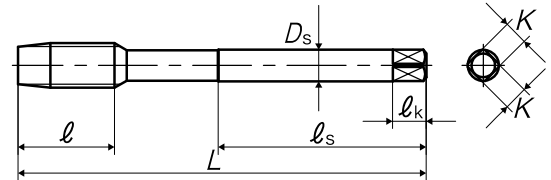
TYPE: 1



Spiral Fluted Taps
(for blind hole)

①

TYPE: 3



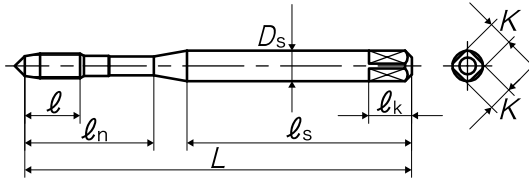
Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

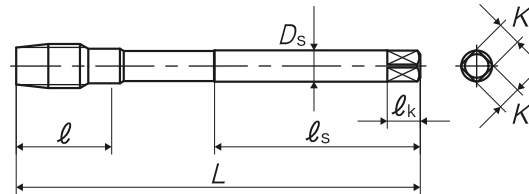
TYPE: 2



Hand Taps

④

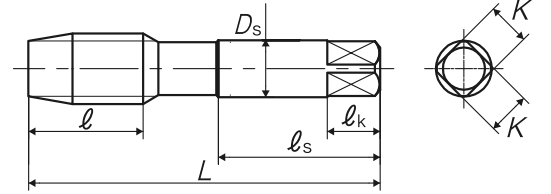
TYPE: 4



Cemented
Carbide Taps

⑤

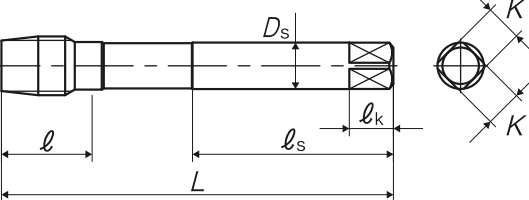
TYPE: 5



Roll Taps

⑥

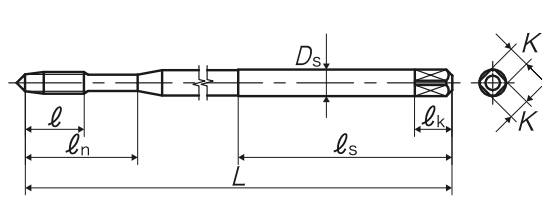
TYPE: 6



Special Thread Taps
Simple Inspection Tools

⑦

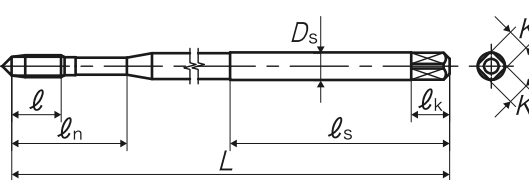
TYPE: 7



Pipe Taps

⑧

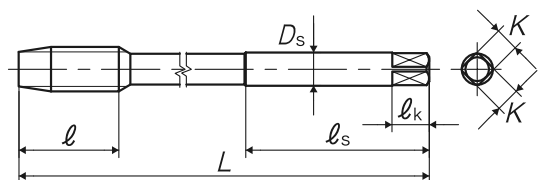
TYPE: 8



Thread Mills
Premium Thread Mills

⑨

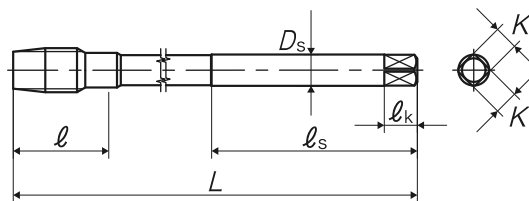
TYPE: 9



Dies

⑩

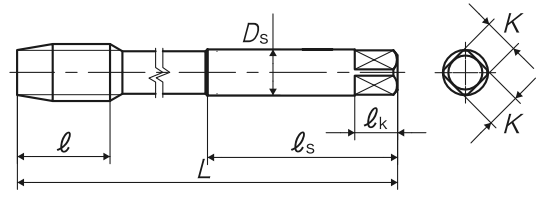
TYPE: 10



Center Drills
Centering Tools

⑪

TYPE: 11



Precision Machinery/
Medical Surgical Instruments

⑫

③ Spiral Pointed Tap Series for through 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

HVPO Z-PRO Hybrid Value Spiral Pointed Taps for Steels

Segment : 1E

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	1113101035	5P	56	9	18	32	4	3.2	6	3	1	¥ 1,400
M3 × 0.5	P4	1113201035	5P	56	9	18	32	4	3.2	6	3	1	¥ 1,400
M3 × 0.35	P2	1113101036	5P	56	6.5	18	32	4	3.2	6	3	2	¥ 2,470
M3.5 × 0.6	P2	1113101038	5P	63	13	20	36	5	4	7	3	1	¥ 1,450
M3.5 × 0.6	P3	1113201038	5P	63	13	20	36	5	4	7	3	1	¥ 1,450 ※
M4 × 0.7	P3	1113101042	5P	63	13	21	36	5	4	7	3	1	¥ 1,400
M4 × 0.7	P4	1113201042	5P	63	13	21	36	5	4	7	3	1	¥ 1,400
M4 × 0.5	P3	1113101043	5P	63	9	21	36	5	4	7	3	2	¥ 2,120
M4.5 × 0.5	P3	1113101046	5P	70	9	24	40	5.5	4.5	7	3	2	¥ 2,120 ※
M5 × 0.8	P3	1113101049	5P	70	14	25	40	5.5	4.5	7	3	1	¥ 1,410
M5 × 0.8	P4	1113201049	5P	70	14	25	40	5.5	4.5	7	3	1	¥ 1,410
M5 × 0.5	P3	1113101051	5P	70	9	25	40	5.5	4.5	7	3	2	¥ 2,120
M6 × 1	P3	1113101055	5P	80	15	30	45	6	4.5	7	3	1	¥ 1,610
M6 × 1	P4	1113201055	5P	80	15	30	45	6	4.5	7	3	1	¥ 1,610
M6 × 0.75	P3	1113101056	5P	80	15	30	45	6	4.5	7	3	1	¥ 2,270
M6 × 0.5	P3	1113101057	5P	80	9	30	45	6	4.5	7	3	2	¥ 2,270
M7 × 1	P3	1113101060	5P	90	15	-	46	6.2	5	8	3	3	¥ 1,980
M7 × 1	P4	1113201060	5P	90	15	-	46	6.2	5	8	3	3	¥ 1,980 ※
M7 × 0.75	P3	1113101061	5P	90	15	-	46	6.2	5	8	3	3	¥ 2,930 ※
M7 × 0.5	P3	1113101062	5P	90	10	-	46	6.2	5	8	3	4	¥ 3,650 ※
M8 × 1.25	P3	1113101064	5P	90	19	-	46	6.2	5	8	3	3	¥ 2,270
M8 × 1.25	P4	1113201064	5P	90	19	-	46	6.2	5	8	3	3	¥ 2,270
M8 × 1	P3	1113101065	5P	90	19	-	46	6.2	5	8	3	3	¥ 2,580
M8 × 1	P4	1113201065	5P	90	19	-	46	6.2	5	8	3	3	¥ 2,580 ※
M8 × 0.75	P3	1113101066	5P	90	19	-	46	6.2	5	8	3	3	¥ 2,930 ※
M8 × 0.75	P4	1113201066	5P	90	19	-	46	6.2	5	8	3	3	¥ 2,930 ※
M8 × 0.5	P3	1113101067	5P	90	10	-	46	6.2	5	8	3	4	¥ 3,650 ※
M8 × 0.5	P4	1113201067	5P	90	10	-	46	6.2	5	8	3	4	¥ 3,650 ※
M9 × 1	P3	1113101072	5P	100	23	-	51	7	5.5	8	3	3	¥ 3,520 ※
M9 × 1	P4	1113201072	5P	100	23	-	51	7	5.5	8	3	3	¥ 3,520 ※
M10 × 1.5	P4	1113101078	5P	100	23	-	51	7	5.5	8	3	3	¥ 2,970
M10 × 1.5	P5	1113201078	5P	100	23	-	51	7	5.5	8	3	3	¥ 2,970
M10 × 1.25	P3	1113101079	5P	100	23	-	51	7	5.5	8	3	3	¥ 2,970
M10 × 1.25	P4	1113201079	5P	100	23	-	51	7	5.5	8	3	3	¥ 2,970 ※
M10 × 1	P3	1113101080	5P	100	23	-	51	7	5.5	8	3	3	¥ 3,520
M10 × 1	P4	1113201080	5P	100	23	-	51	7	5.5	8	3	3	¥ 3,520 ※
M12 × 1.75	P4	1113101088	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 4,000
M12 × 1.75	P5	1113201088	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 4,000
M12 × 1.5	P4	1113101089	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 4,000
M12 × 1.5	P5	1113201089	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 4,000 ※
M12 × 1.25	P4	1113101090	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 4,000
M12 × 1.25	P5	1113201090	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 4,000 ※
M12 × 1	P4	1113101091	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 4,860
M12 × 1	P5	1113201091	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 4,860 ※
M14 × 2	P4	1113101100	5P	110	26	-	56	10.5	8	11	3	3	¥ 5,640
M14 × 2	P5	1113201100	5P	110	26	-	56	10.5	8	11	3	3	¥ 5,640 ※
M14 × 1.5	P4	1113101102	5P	110	26	-	56	10.5	8	11	3	3	¥ 5,640
M14 × 1.5	P5	1113201102	5P	110	26	-	56	10.5	8	11	3	3	¥ 5,640 ※

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

3

JIS

HVPO Z-PRO Hybrid Value Spiral Pointed 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
M14 × 1.25	P4	1113101103	5P	110	26	-	56	10.5	8	11	3	3	¥ 6,560
M14 × 1.25	P5	1113201103	5P	110	26	-	56	10.5	8	11	3	3	¥ 6,560 ※
M14 × 1	P4	1113101104	5P	110	26	-	56	10.5	8	11	3	3	¥ 6,560
M14 × 1	P5	1113201104	5P	110	26	-	56	10.5	8	11	3	3	¥ 6,560 ※
M16 × 2	P4	1113101114	5P	110	26	-	56	12.5	10	13	3	3	¥ 7,300
M16 × 2	P5	1113201114	5P	110	26	-	56	12.5	10	13	3	3	¥ 7,300
M16 × 1.5	P4	1113101116	5P	110	26	-	56	12.5	10	13	3	3	¥ 7,300
M16 × 1.5	P5	1113201116	5P	110	26	-	56	12.5	10	13	3	3	¥ 7,300 ※
M16 × 1.25	P4	1113101117	5P	110	26	-	56	12.5	10	13	3	3	¥ 9,260
M16 × 1.25	P5	1113201117	5P	110	26	-	56	12.5	10	13	3	3	¥ 9,260 ※
M16 × 1	P4	1113101118	5P	110	26	-	56	12.5	10	13	3	3	¥ 9,260
M16 × 1	P5	1113201118	5P	110	26	-	56	12.5	10	13	3	3	¥ 9,260 ※
M18 × 2.5	P5	1113101128	5P	125	33	-	64	14	11	14	3	3	¥ 10,100
M18 × 2.5	P6	1113201128	5P	125	33	-	64	14	11	14	3	3	¥ 10,100 ※
M18 × 2	P5	1113101129	5P	125	33	-	64	14	11	14	3	3	¥ 10,100
M18 × 2	P6	1113201129	5P	125	33	-	64	14	11	14	3	3	¥ 10,100 ※
M18 × 1.5	P4	1113101130	5P	125	33	-	64	14	11	14	3	3	¥ 10,100
M18 × 1.5	P5	1113201130	5P	125	33	-	64	14	11	14	3	3	¥ 10,100 ※
M18 × 1	P4	1113101132	5P	125	18	-	64	14	11	14	3	4	¥ 13,100
M18 × 1	P5	1113201132	5P	125	18	-	64	14	11	14	3	4	¥ 13,100 ※
M20 × 2.5	P5	1113101141	5P	140	33	-	71	15	12	15	3	5	¥ 13,700
M20 × 2.5	P6	1113201141	5P	140	33	-	71	15	12	15	3	5	¥ 13,700 ※
M20 × 2	P5	1113101142	5P	140	33	-	71	15	12	15	3	5	¥ 13,700
M20 × 2	P6	1113201142	5P	140	33	-	71	15	12	15	3	5	¥ 13,700 ※
M20 × 1.5	P4	1113101144	5P	140	33	-	71	15	12	15	3	5	¥ 13,700
M20 × 1.5	P5	1113201144	5P	140	33	-	71	15	12	15	3	5	¥ 13,700 ※
M20 × 1	P4	1113101146	5P	140	18	-	71	15	12	15	3	6	¥ 17,400
M20 × 1	P5	1113201146	5P	140	18	-	71	15	12	15	3	6	¥ 17,400 ※
M22 × 2.5	P5	1113101156	5P	140	33	-	71	17	13	16	3	5	¥ 17,400
M22 × 2.5	P6	1113201156	5P	140	33	-	71	17	13	16	3	5	¥ 17,400 ※
M22 × 2	P5	1113101157	5P	140	33	-	71	17	13	16	3	5	¥ 17,400
M22 × 2	P6	1113201157	5P	140	33	-	71	17	13	16	3	5	¥ 17,400 ※
M22 × 1.5	P4	1113101158	5P	140	33	-	71	17	13	16	3	5	¥ 17,400
M22 × 1.5	P5	1113201158	5P	140	33	-	71	17	13	16	3	5	¥ 17,400 ※
M24 × 3	P5	1113101167	5P	160	37	-	82	19	15	18	3	5	¥ 21,700
M24 × 3	P6	1113201167	5P	160	37	-	82	19	15	18	3	5	¥ 21,700 ※
M24 × 2	P5	1113101169	5P	160	37	-	82	19	15	18	3	5	¥ 21,700
M24 × 2	P6	1113201169	5P	160	37	-	82	19	15	18	3	5	¥ 21,700 ※
M24 × 1.5	P4	1113101170	5P	160	37	-	82	19	15	18	3	5	¥ 21,700
M24 × 1.5	P5	1113201170	5P	160	37	-	82	19	15	18	3	5	¥ 21,700 ※
M25 × 1.5	P4	1113101177	5P	160	37	-	82	19	15	18	3	5	¥ 28,600
M25 × 1.5	P5	1113201177	5P	160	37	-	82	19	15	18	3	5	¥ 28,600 ※
M26 × 3	P5	1113101181	5P	160	37	-	82	20	15	18	4	5	¥ 30,600 ※
M27 × 3	P5	1113101186	5P	160	37	-	82	20	15	18	4	5	¥ 30,600
M27 × 2	P5	1113101187	5P	160	37	-	82	20	15	18	4	5	¥ 30,600
M27 × 1.5	P4	1113101188	5P	160	37	-	82	20	15	18	4	5	¥ 30,600
M28 × 1.5	P4	1113101194	5P	180	44	-	92	23	17	20	4	5	¥ 38,900
M30 × 3.5	P5	1113101199	5P	180	44	-	92	23	17	20	4	5	¥ 38,900
M30 × 3	P6	1113101200	5P	180	44	-	92	23	17	20	4	5	¥ 38,900
M30 × 2	P5	1113101201	5P	180	44	-	92	23	17	20	4	5	¥ 38,900

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

③-16

※ = Specified Distribution Items. Made to order products.

 Think threads with
YAMAWA

③ Spiral Pointed Tap Series for through 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

HVPO Z-PRO Hybrid Value Spiral Pointed 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
M30 × 1.5	P4	1113101202	5P	180	44	-	92	23	17	20	4	5	¥ 38,900
M32 × 2	P5	1113101207	5P	180	44	-	92	24	19	22	4	5	¥ 45,400
M32 × 1.5	P4	1113101208	5P	180	44	-	92	24	19	22	4	5	¥ 45,400
M33 × 3.5	P5	1113101211	5P	180	46	-	92	25	19	22	4	5	¥ 45,400
M33 × 3	P6	1113101212	5P	180	46	-	92	25	19	22	4	5	¥ 45,400
M33 × 2	P5	1113101213	5P	180	46	-	92	25	19	22	4	5	¥ 45,400
M33 × 1.5	P4	1113101214	5P	180	46	-	92	25	19	22	4	5	¥ 45,400
M35 × 2	P5	1113101221	5P	200	52	-	102	28	21	24	4	5	¥ 52,300
M35 × 1.5	P4	1113101222	5P	200	26	-	102	28	21	24	4	6	¥ 52,300
M36 × 4	P6	1113101225	5P	200	52	-	102	28	21	24	4	5	¥ 52,300
M36 × 3	P6	1113101226	5P	200	52	-	102	28	21	24	4	5	¥ 52,300
M36 × 2	P5	1113101227	5P	200	52	-	102	28	21	24	4	5	¥ 52,300
M36 × 1.5	P4	1113101228	5P	200	26	-	102	28	21	24	4	6	¥ 52,300
M39 × 4	P6	1113101240	5P	200	52	-	102	30	23	26	4	5	¥ 60,000
M39 × 3	P6	1113101241	5P	200	52	-	102	30	23	26	4	5	¥ 60,000
M42 × 4.5	P6	1113101250	5P	200	59	-	102	32	26	30	4	5	¥ 73,000
M42 × 3	P6	1113101252	5P	200	59	-	102	32	26	30	4	5	¥ 73,000
M45 × 4.5	P6	1113101261	5P	220	59	-	112	35	26	30	4	5	¥ 84,500
M48 × 5	P6	1113101271	5P	250	65	-	128	38	29	32	4	5	¥107,000
M48 × 3	P6	1113101274	5P	250	65	-	128	38	29	32	4	5	¥107,000
For Unified Threads													
No.6-32UNC	P2	1113103023	5P	63	13	19	36	5	4	7	2	1	¥ 1,820 ※
No.6-32UNC	P3	1113203023	5P	63	13	19	36	5	4	7	2	1	¥ 1,820 ※
No.6-40UNF	P2	1113103024	5P	63	13	19	36	5	4	7	2	1	¥ 1,820 ※
No.6-40UNF	P3	1113203024	5P	63	13	19	36	5	4	7	2	1	¥ 1,820 ※
No.8-32UNC	P2	1113103029	5P	70	14	23	40	5.5	4.5	7	2	1	¥ 1,830 ※
No.8-32UNC	P3	1113203029	5P	70	14	23	40	5.5	4.5	7	2	1	¥ 1,830 ※
No.8-36UNF	P2	1113103030	5P	70	14	23	40	5.5	4.5	7	2	1	¥ 1,830 ※
No.8-36UNF	P3	1113203030	5P	70	14	23	40	5.5	4.5	7	2	1	¥ 1,830 ※
No.10-24UNC	P2	1113103039	5P	70	14	24	40	5.5	4.5	7	2	1	¥ 1,830 ※
No.10-24UNC	P3	1113203039	5P	70	14	24	40	5.5	4.5	7	2	1	¥ 1,830 ※
No.10-32UNF	P2	1113103041	5P	70	14	24	40	5.5	4.5	7	2	1	¥ 1,830 ※
No.10-32UNF	P3	1113203041	5P	70	14	24	40	5.5	4.5	7	2	1	¥ 1,830 ※
No.12-24UNC	P2	1113103047	5P	80	15	28	45	6	4.5	7	2	1	¥ 2,030 ※
No.12-24UNC	P3	1113203047	5P	80	15	28	45	6	4.5	7	2	1	¥ 2,030 ※
No.12-28UNF	P2	1113103048	5P	80	15	28	45	6	4.5	7	2	1	¥ 2,030 ※
No.12-28UNF	P3	1113203048	5P	80	15	28	45	6	4.5	7	2	1	¥ 2,030 ※
1/4-20UNC	P2	1113103058	5P	80	15	30	45	6	4.5	7	3	1	¥ 2,030 ※
1/4-20UNC	P3	1113203058	5P	80	15	30	45	6	4.5	7	3	1	¥ 2,030 ※
1/4-28UNF	P2	1113103062	5P	80	15	30	45	6	4.5	7	3	1	¥ 2,030 ※
1/4-28UNF	P3	1113203062	5P	80	15	30	45	6	4.5	7	3	1	¥ 2,030 ※
5/16-18UNC	P3	1113103071	5P	90	19	-	46	6.2	5	8	3	3	¥ 2,960 ※
5/16-18UNC	P4	1113203071	5P	90	19	-	46	6.2	5	8	3	3	¥ 2,960 ※
5/16-24UNF	P3	1113103074	5P	90	19	-	46	6.2	5	8	3	3	¥ 2,960 ※
3/8-16UNC	P3	1113103082	5P	100	23	-	51	7	5.5	8	3	3	¥ 3,790 ※
3/8-16UNC	P4	1113203082	5P	100	23	-	51	7	5.5	8	3	3	¥ 3,790 ※
3/8-24UNF	P3	1113103085	5P	100	23	-	51	7	5.5	8	3	3	¥ 3,790 ※
7/16-14UNC	P3	1113103098	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 5,330 ※
7/16-14UNC	P4	1113203098	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 5,330 ※
7/16-20UNF	P3	1113103101	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 5,330 ※

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

HVPO Z-PRO Hybrid Value Spiral Pointed 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
1/2-13UNC	P3	1113103111	5P	110	26	-	56	10.5	8	11	3	3	¥ 5,650 ※
1/2-13UNC	P4	1113203111	5P	110	26	-	56	10.5	8	11	3	3	¥ 5,650 ※
1/2-20UNF	P4	1113103115	5P	110	26	-	56	10.5	8	11	3	3	¥ 5,650 ※
9/16-12UNC	P3	1113103126	5P	110	26	-	56	12.5	10	13	3	3	¥ 8,790 ※
9/16-12UNC	P4	1113203126	5P	110	26	-	56	12.5	10	13	3	3	¥ 8,790 ※
9/16-18UNF	P4	1113103129	5P	110	26	-	56	12.5	10	13	3	3	¥ 8,790 ※
5/8-11UNC	P4	1113103138	5P	110	26	-	56	12.5	10	13	3	3	¥ 8,790 ※
5/8-11UNC	P5	1113203138	5P	110	26	-	56	12.5	10	13	3	3	¥ 8,790 ※
5/8-18UNF	P4	1113103142	5P	110	26	-	56	12.5	10	13	3	3	¥ 8,790 ※
3/4-10UNC	P4	1113103161	5P	140	33	-	71	15	12	15	3	5	¥ 16,100 ※
3/4-10UNC	P5	1113203161	5P	140	33	-	71	15	12	15	3	5	¥ 16,100 ※
3/4-16UNF	P4	1113103164	5P	140	33	-	71	15	12	15	3	5	¥ 16,100 ※
7/8-9UNC	P5	1113103181	5P	140	33	-	71	17	13	16	3	5	¥ 23,500 ※
7/8-14UNF	P4	1113103184	5P	140	33	-	71	17	13	16	3	5	¥ 23,500 ※
For Whitworth Threads													
5/32W32	P2	1113105028	5P	63	13	20	36	5	4	7	2	1	¥ 1,820 ※
3/16W24	P3	1113105034	5P	70	14	23	40	5.5	4.5	7	2	1	¥ 1,830 ※
1/4W20	P3	1113105058	5P	80	15	30	45	6	4.5	7	3	1	¥ 2,030 ※
5/16W18	P3	1113105071	5P	90	19	-	46	6.2	5	8	3	3	¥ 2,960 ※
3/8W16	P4	1113105082	5P	100	23	-	51	7	5.5	8	3	3	¥ 3,790 ※
7/16W14	P4	1113105098	5P	110	26	-	56	8.5	6.5	9	3	3	¥ 5,330 ※
1/2W12	P4	1113105110	5P	110	26	-	56	10.5	8	11	3	3	¥ 5,650 ※
5/8W11	P4	1113105138	5P	110	26	-	56	12.5	10	13	3	3	¥ 8,790 ※
3/4W10	P4	1113105161	5P	140	33	-	71	15	12	15	3	5	¥ 16,100 ※
7/8W9	P5	1113105181	5P	140	33	-	71	17	13	16	3	5	¥ 23,500 ※
Long shank, for Metric Threads													
M3 × 0.5	P3	2113101035	5P	100	9	18	32	4	3.2	6	3	7	¥ 4,340
M3 × 0.35	P2	2113101036	5P	100	6.5	18	32	4	3.2	6	3	8	¥ 7,660 ※
M4 × 0.7	P3	2113101042	5P	100	11	21	36	5	4	7	3	7	¥ 3,920
M4 × 0.5	P3	2113101043	5P	100	9	21	36	5	4	7	3	8	¥ 5,940 ※
M5 × 0.8	P3	2113101049	5P	100	13	25	40	5.5	4.5	7	3	7	¥ 3,250
M5 × 0.5	P3	2113101051	5P	100	9	25	40	5.5	4.5	7	3	8	¥ 4,880 ※
M6 × 1	P3	2113101055	5P	100	15	30	45	6	4.5	7	3	7	¥ 2,900
M6 × 1	P3	2313101055	5P	150	15	30	45	6	4.5	7	3	7	¥ 5,320
M6 × 0.75	P3	2113101056	5P	100	15	30	45	6	4.5	7	3	7	¥ 4,090 ※
M6 × 0.5	P3	2113101057	5P	100	9	30	45	6	4.5	7	3	8	¥ 4,090 ※
M8 × 1.25	P3	2113101064	5P	150	19	-	46	6.2	5	8	3	9	¥ 6,810
M8 × 1	P3	2113101065	5P	150	19	-	46	6.2	5	8	3	9	¥ 7,740 ※
M10 × 1.5	P4	2113101078	5P	150	23	-	51	7	5.5	8	3	9	¥ 8,020
M10 × 1.25	P3	2113101079	5P	150	23	-	51	7	5.5	8	3	9	¥ 8,020
M10 × 1	P3	2113101080	5P	150	23	-	51	7	5.5	8	3	9	¥ 9,510 ※
M12 × 1.75	P4	2113101088	5P	150	26	-	56	8.5	6.5	9	3	9	¥ 9,600
M12 × 1.5	P4	2113101089	5P	150	26	-	56	8.5	6.5	9	3	9	¥ 9,600 ※
M12 × 1.25	P4	2113101090	5P	150	26	-	56	8.5	6.5	9	3	9	¥ 9,600
M14 × 2	P4	2113101100	5P	150	26	-	56	10.5	8	11	3	9	¥ 11,900
M14 × 1.5	P4	2113101102	5P	150	26	-	56	10.5	8	11	3	9	¥ 11,900
M16 × 2	P4	2113101114	5P	150	26	-	56	12.5	10	13	3	9	¥ 13,200
M16 × 1.5	P4	2113101116	5P	150	26	-	56	12.5	10	13	3	9	¥ 13,200
M18 × 2.5	P5	2113101128	5P	200	33	-	64	14	11	14	3	9	¥ 22,300 ※
M18 × 2	P5	2113101129	5P	200	33	-	64	14	11	14	3	9	¥ 22,300 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

3

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

③-18

③ Spiral Pointed Tap Series for through 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

HVPO Z-PRO Hybrid Value Spiral Pointed 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
M18 × 1.5	P4	2113101130	5P	200	33	-	64	14	11	14	3	9	¥ 22,300 ※
M18 × 1	P4	2113101132	5P	200	18	-	64	14	11	14	3	10	¥ 28,900 ※
M20 × 2.5	P5	2113101141	5P	200	33	-	71	15	12	15	3	11	¥ 30,200
M20 × 2	P5	2113101142	5P	200	33	-	71	15	12	15	3	11	¥ 30,200 ※
M20 × 1.5	P4	2113101144	5P	200	33	-	71	15	12	15	3	11	¥ 30,200 ※
M22 × 2.5	P5	2113101156	5P	200	33	-	71	17	13	16	3	11	¥ 31,400 ※
M22 × 1.5	P4	2113101158	5P	200	33	-	71	17	13	16	3	11	¥ 31,400 ※
M24 × 3	P5	2113101167	5P	250	37	-	82	19	15	18	3	11	¥ 43,400 ※
M24 × 1.5	P4	2113101170	5P	250	37	-	82	19	15	18	3	11	¥ 43,400 ※
M27 × 3	P5	2113101186	5P	250	37	-	82	20	15	18	4	11	¥ 52,100 ※
M27 × 1.5	P4	2113101188	5P	250	37	-	82	20	15	18	4	11	¥ 52,100 ※
M30 × 3.5	P5	2113101199	5P	250	44	-	92	23	17	20	4	11	¥ 66,200 ※
M30 × 3	P6	2113101200	5P	250	44	-	92	23	17	20	4	11	¥ 66,200 ※
M30 × 1.5	P4	2113101202	5P	250	44	-	92	23	17	20	4	11	¥ 66,200 ※
M33 × 3.5	P5	2113101211	5P	250	46	-	92	25	19	22	4	11	¥ 77,200 ※
M33 × 3	P6	2113101212	5P	250	46	-	92	25	19	22	4	11	¥ 77,200 ※
M36 × 4	P6	2113101225	5P	300	52	-	102	28	21	24	4	11	¥ 89,000 ※
M36 × 3	P6	2113101226	5P	300	52	-	102	28	21	24	4	11	¥ 89,000 ※
M39 × 4	P6	2113101240	5P	300	52	-	102	30	23	26	4	11	¥102,000 ※
M39 × 3	P6	2113101241	5P	300	52	-	102	30	23	26	4	11	¥102,000 ※
M42 × 4.5	P6	2113101250	5P	300	59	-	102	32	26	30	4	11	¥125,000 ※
M42 × 3	P6	2113101252	5P	300	59	-	102	32	26	30	4	11	¥125,000 ※
M48 × 5	P6	2113101271	5P	300	65	-	128	38	29	32	4	11	¥182,000 ※
M48 × 3	P6	2113101274	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 Pointed Tap Series for through hole

ANSI

Z-PRO HVPO

Z-PRO Hybrid Value Spiral Pointed Taps for Steels



Specification

HSS

OX

Oxide



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

■ Proper tool projection length is secured, achieving a good supply of tapping fluid.

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)

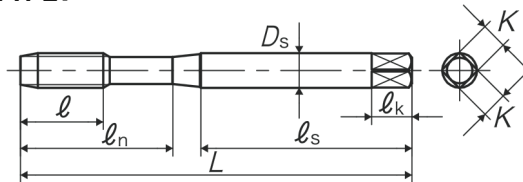
High carbon steels
高炭素鋼
3~12
(m/min)

Alloy steels
合金鋼
3~12
(m/min)

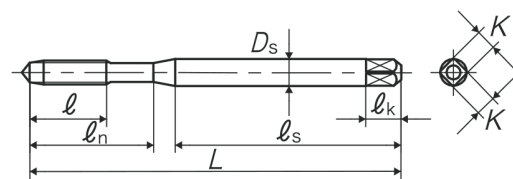
Stainless steels
ステンレス鋼
~5
(m/min)

Cast steels
鋳鋼
3~12
(m/min)

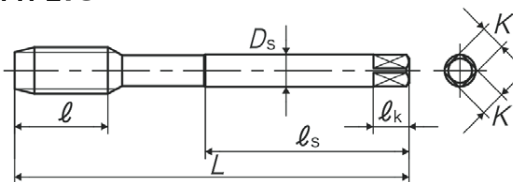
TYPE:2



TYPE:1



TYPE:3



Segment : 1E

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	D4	5113101035	5P	2.205	0.433	0.736	1.339	0.141	0.110	0.187	3	1
M3 × 0.35	D3	5113101036	5P	2.205	0.256	0.736	1.339	0.141	0.110	0.187	3	1
M3.5 × 0.6	D4	5113101038	5P	2.205	0.433	0.748	1.339	0.141	0.110	0.187	3	1
M4 × 0.7	D5	5113101042	5P	2.480	0.512	0.815	1.535	0.168	0.131	0.25	3	1
M4 × 0.5	D4	5113101043	5P	2.480	0.354	0.815	1.535	0.168	0.131	0.25	3	1
M4.5 × 0.5	D4	5113101046	5P	2.756	0.354	0.945	1.654	0.194	0.152	0.25	3	1
M5 × 0.8	D5	5113101049	5P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	3	1
M5 × 0.5	D4	5113101051	5P	2.756	0.354	0.984	1.654	0.194	0.152	0.25	3	1
M6 × 1	D6	5113101055	5P	3.150	0.591	1.181	1.713	0.255	0.191	0.312	3	1
M6 × 0.75	D5	5113101056	5P	3.150	0.591	1.181	1.713	0.255	0.191	0.312	3	1
M6 × 0.5	D4	5113101057	5P	3.150	0.354	1.181	1.713	0.255	0.191	0.312	3	1
M7 × 1	D6	5113101060	5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	2
M7 × 0.75	D5	5113101061	5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	2
M7 × 0.5	D4	5113101062	5P	3.543	0.394	1.339	1.831	0.318	0.238	0.375	3	2
M8 × 1.25	D7	5113101064	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	2
M8 × 1	D6	5113101065	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	2
M8 × 0.5	D5	5113101067	5P	3.543	0.394	1.378	1.831	0.318	0.238	0.375	3	2

Think threads with
YAMAWA

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

3

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

③-20

③ Spiral Pointed Tap Series for through 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

HVPO Z-PRO Hybrid Value Spiral Pointed 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
M8 × 0.75	D5	5113101066	5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	2
M10 × 1.5	D7	5113101078	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	2
M10 × 1.25	D6	5113101079	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	2
M10 × 1	D6	5113101080	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	2
M12 × 1.75	D8	5113101088	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	3
M12 × 1.5	D7	5113101089	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	3
M12 × 1.25	D7	5113101090	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	3
M12 × 1	D6	5113101091	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	3
M14 × 2	D8	5113101100	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	3
M14 × 1.5	D7	5113101102	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	3
M14 × 1.25	D7	5113101103	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	3
M16 × 2	D8	5113101114	5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	3
M16 × 1.5	D7	5113101116	5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	3
M16 × 1.25	D7	5113101117	5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	3
M16 × 1	D6	5113101118	5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	3
M18 × 2.5	D8	5113101128	5P	4.921	1.299	-	2.520	0.542	0.406	0.625	3	3
M18 × 2	D8	5113101129	5P	4.921	1.299	-	2.520	0.542	0.406	0.625	3	3
M18 × 1.5	D7	5113101130	5P	4.921	0.945	-	2.520	0.542	0.406	0.625	3	3
M18 × 1	D6	5113101132	5P	4.921	0.945	-	2.520	0.542	0.406	0.625	3	3
M20 × 2.5	D8	5113101141	5P	5.512	1.299	-	2.795	0.652	0.489	0.687	3	3
M20 × 2	D8	5113101142	5P	5.512	1.299	-	2.795	0.652	0.489	0.687	3	3
M20 × 1.5	D7	5113101144	5P	5.512	0.945	-	2.795	0.652	0.489	0.687	3	3
M20 × 1	D6	5113101146	5P	5.512	0.945	-	2.795	0.652	0.489	0.687	3	3
M22 × 2.5	D8	5113101156	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	3
M22 × 2	D8	5113101157	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	3
M22 × 1.5	D7	5113101158	5P	5.512	0.945	-	2.795	0.697	0.523	0.75	3	3
M24 × 3	D9	5113101167	5P	6.299	1.457	-	3.228	0.760	0.570	0.75	3	3
M24 × 1.5	D7	5113101170	5P	6.299	1.063	-	3.228	0.760	0.570	0.75	3	3
M24 × 2	D8	5113101169	5P	6.299	1.063	-	3.228	0.760	0.570	0.75	3	3
M25 × 1.5	D7	5113101177	5P	6.299	1.063	-	3.228	0.800	0.600	0.812	3	3
M26 × 3	D9	5113101181	5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	3
M27 × 3	D9	5113101186	5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	3
M27 × 2	D8	5113101187	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	3
M27 × 1.5	D7	5113101188	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	3
M28 × 1.5	D7	5113101194	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	3
M30 × 3.5	D10	5113101199	5P	7.087	1.732	-	3.622	1.021	0.766	1	4	3
M30 × 3	D9	5113101200	5P	7.087	1.732	-	3.622	1.021	0.766	1	4	3
M30 × 2	D8	5113101201	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	3
M30 × 1.5	D7	5113101202	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	3
M32 × 2	D8	5113101207	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	3
M32 × 1.5	D7	5113101208	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	3
M33 × 3.5	D10	5113101211	5P	7.087	1.732	-	3.622	1.108	0.831	1.062	4	3
M33 × 3	D9	5113101212	5P	7.087	1.732	-	3.622	1.108	0.831	1.062	4	3
M33 × 2	D8	5113101213	5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	3
M33 × 1.5	D7	5113101214	5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	3
M35 × 2	D8	5113101221	5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	3
M35 × 1.5	D7	5113101222	5P	7.874	1.142	-	4.016	1.108	0.831	1.062	4	3
M36 × 4	D10	5113101225	5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	3
M36 × 3	D9	5113101226	5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	3
M36 × 2	D8	5113101227	5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	3

ANSI

③-21

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

HVPO Z-PRO Hybrid Value Spiral Pointed 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
M36 × 1.5	D7	5113101228	5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	3
M39 × 4	D10	5113101240	5P	7.874	2.047	-	4.016	1.305	0.979	1.125	4	3
M39 × 3	D9	5113101241	5P	7.874	2.047	-	4.016	1.305	0.979	1.125	4	3
M42 × 4.5	D11	5113101250	5P	7.874	2.047	-	4.016	1.430	1.072	1.25	4	3
M42 × 3	D9	5113101252	5P	7.874	2.047	-	4.016	1.430	1.072	1.25	4	3
M45 × 4.5	D11	5113101261	5P	8.661	2.323	-	4.409	1.519	1.139	1.25	4	3
M48 × 5	D11	5113101271	5P	9.843	2.559	-	5.039	1.644	1.233	1.375	4	3
M48 × 3	D10	5113101274	5P	9.843	2.559	-	5.039	1.644	1.233	1.375	4	3
For Unified Threads												
No.6-32UNC	2BX	5113103023	5P	2.205	0.433	0.748	1.339	0.141	0.110	0.187	2	1
No.6-40UNF	2BX	5113103024	5P	2.205	0.433	0.748	1.339	0.141	0.110	0.187	2	1
No.8-32UNC	2BX	5113103029	5P	2.480	0.512	0.827	1.535	0.168	0.131	0.25	2	1
No.8-36UNF	2BX	5113103030	5P	2.480	0.512	0.827	1.535	0.168	0.131	0.25	2	1
No.10-24UNC	2BX	5113103039	5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	2	1
No.10-32UNF	2BX	5113103041	5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	2	1
No.12-24UNC	2BX	5113103047	5P	3.150	0.354	0.984	1.953	0.255	0.165	0.281	2	1
No.12-28UNF	2BX	5113103048	5P	3.150	0.354	0.984	1.953	0.255	0.165	0.281	2	1
1/4-20UNC	2BX	5113103058	5P	3.150	0.591	1.181	1.713	0.255	0.191	0.312	3	1
1/4-28UNF	2BX	5113103062	5P	3.150	0.591	1.181	1.713	0.255	0.191	0.312	3	1
5/16-18UNC	2BX	5113103071	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	2
5/16-24UNF	2BX	5113103074	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	2
3/8-16UNC	2BX	5113103082	5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	2
3/8-24UNF	2BX	5113103085	5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	2
7/16-14UNC	2BX	5113103098	5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	3
7/16-20UNF	2BX	5113103101	5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	3
1/2-13UNC	2BX	5113103111	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	3
1/2-20UNF	2BX	5113103115	5P	4.331	1.024	-	0.367	0.429	0.275	0.437	3	3
9/16-12UNC	2BX	5113103126	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	3
9/16-18UNF	2BX	5113103129	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	3
5/8-11UNC	2BX	5113103138	5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	3
5/8-18UNF	2BX	5113103142	5P	4.331	1.024	-	2.205	0.480	0.360	0.562	3	3
3/4-10UNC	2BX	5113103161	5P	4.921	1.299	-	2.520	0.590	0.442	0.687	3	3
3/4-16UNF	2BX	5113103164	5P	4.921	1.299	-	2.520	0.590	0.442	0.687	3	3
7/8-9UNC	2BX	5113103181	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	3
7/8-14UNF	2BX	5113103184	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	3

3

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

③-22

Think threads with
YAMAWA

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

③ Spiral Pointed Tap Series for through 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

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

Z-PRO
HVPO

Z-PRO Hybrid Value Spiral Pointed Taps for Steels



Specification

HSS

OX
Oxide



- Chip ejection efficiency is improved and cutting resistance is reduced by the unique cutting edge shape, achieving a good internal thread and improved durability.
- Proper tool projection length is secured, achieving a good supply of tapping fluid.

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)

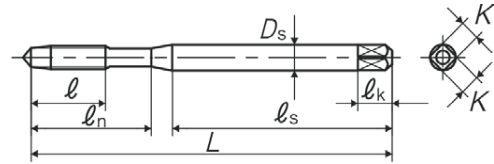
High carbon steels
高炭素鋼
3~12
(m/min)

Alloy steels
合金鋼
3~12
(m/min)

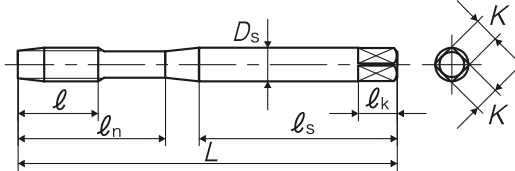
Stainless steels
ステンレス鋼
~5
(m/min)

Cast steels
鋳鋼
3~12
(m/min)

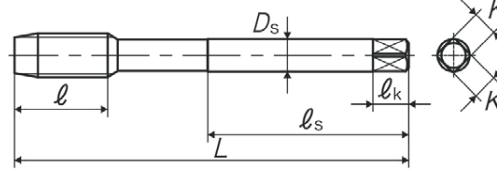
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1E

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	ISO2X	3113101035	5P	56	9	18	34	3.5	2.7	6	3	1
M3 × 0.35	ISO2X	3113101036	5P	56	6.5	18	34	3.5	2.7	6	3	1
M3.5 × 0.6	ISO2X	3113101038	5P	56	11	20	32.5	4	3	6	3	1
M4 × 0.7	ISO2X	3113101042	5P	63	13	21	38	4.5	3.4	6	3	1
M4 × 0.5	ISO2X	3113101043	5P	63	9	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2X	3113101049	5P	70	14	25	39	6	4.9	8	3	1
M5 × 0.5	ISO2X	3113101051	5P	70	9	25	39	6	4.9	8	3	1
M6 × 1	ISO2X	3113101055	5P	80	15	30	45	6	4.9	8	3	1
M6 × 0.75	ISO2X	3113101056	5P	80	15	30	45	6	4.9	8	3	1
M6 × 0.5	ISO2X	3113101057	5P	80	9	30	45	6	4.9	8	3	1
M7 × 1	ISO2X	3113101060	5P	80	15	30	45	7	5.5	8	3	2
M7 × 0.75	ISO2X	3113101061	5P	80	13	-	41	5.5	4.3	7	3	3
M7 × 0.5	ISO2X	3113101062	5P	80	13	-	41	5.5	4.3	7	3	3
M8 × 1.25	ISO2X	3113101064	5P	90	19	35	47	8	6.2	9	3	2
M8 × 1	ISO2X	3113101065	5P	90	19	-	46	6	4.9	8	3	3
M8 × 0.75	ISO2X	3113101066	5P	80	19	-	41	6	4.9	8	3	3
M8 × 0.5	ISO2X	3113101067	5P	80	19	-	41	6	4.9	8	3	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

3

DIN

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M9 × 1	ISO2X	3113101072	5P	90	19	-	46	7	5.5	8	3	3
M10 × 1.5	ISO2X	3113101078	5P	100	23	39	52.5	10	8	11	3	2
M10 × 1.25	ISO2X	3113101079	5P	100	23	-	51	7	5.5	8	3	3
M10 × 1	ISO2X	3113101080	5P	90	19	-	46	7	5.5	8	3	3
M12 × 1.75	ISO2X	3113101088	5P	110	26	-	56	9	7	10	3	3
M12 × 1.5	ISO2X	3113101089	5P	100	21	-	51	9	7	10	3	3
M12 × 1.25	ISO2X	3113101090	5P	100	21	-	51	9	7	10	3	3
M12 × 1	ISO2X	3113101091	5P	100	21	-	51	9	7	10	3	3
M14 × 2	ISO2X	3113101100	5P	110	26	-	56	11	9	12	3	3
M14 × 1.5	ISO2X	3113101102	5P	100	21	-	51	11	9	12	3	3
M16 × 2	ISO2X	3113101114	5P	110	26	-	56	12	9	12	3	3
M16 × 1.5	ISO2X	3113101116	5P	100	21	-	51	12	9	12	3	3
M18 × 2.5	ISO2X	3113101128	5P	125	33	-	64	14	11	14	3	3
M18 × 2	ISO2X	3113101129	5P	125	33	-	64	14	11	14	3	3
M18 × 1.5	ISO2X	3113101130	5P	110	24	-	56	14	11	14	3	3
M20 × 2.5	ISO2X	3113101141	5P	140	33	-	71	16	12	15	3	3
M20 × 2	ISO2X	3113101142	5P	140	33	-	71	16	12	15	3	3
M20 × 1.5	ISO2X	3113101144	5P	125	24	-	64	16	12	15	3	3
M20 × 1	ISO2X	3113101146	5P	125	24	-	64	16	12	15	3	3
M22 × 2.5	ISO2X	3113101156	5P	140	33	-	71	18	14.5	17	3	3
M22 × 2	ISO2X	3113101157	5P	140	33	-	71	18	14.5	17	3	3
M22 × 1.5	ISO2X	3113101158	5P	125	24	-	64	18	14.5	17	3	3
M24 × 3	ISO2X	3113101167	5P	160	37	-	82	18	14.5	17	3	3
M24 × 1.5	ISO2X	3113101170	5P	140	27	-	71	18	14.5	17	3	3
M27 × 1.5	ISO2X	3113101188	5P	140	27	-	71	20	16	19	4	3
M30 × 3.5	ISO2X	3113101199	5P	180	44	-	92	22	18	21	4	3
M30 × 3	ISO2X	3113101200	5P	180	44	-	92	22	18	21	4	3
M30 × 2	ISO2X	3113101201	5P	150	27	-	77	22	18	21	4	3
M30 × 1.5	ISO2X	3113101202	5P	150	27	-	77	22	18	21	4	3
M32 × 2	ISO2X	3113101207	5P	150	27	-	77	22	18	21	4	3
M32 × 1.5	ISO2X	3113101208	5P	150	27	-	77	22	18	21	4	3
M33 × 3.5	ISO2X	3113101211	5P	180	46	-	92	25	20	23	4	3
M33 × 3	ISO2X	3113101212	5P	180	46	-	92	25	20	23	4	3
M36 × 4	ISO2X	3113101225	5P	200	52	-	102	28	22	25	4	3
M36 × 3	ISO2X	3113101226	5P	200	52	-	102	28	22	25	4	3

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

③-24

③ Spiral Pointed Tap Series for through 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

Dies

⑩

⑪ Center Drills Centering Tools

⑫ Precision Machinery/ Medical Surgical Instruments

Z-PRO

HVPO ZP



Z-PRO

Hybrid Value Spiral Pointed 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)	3~10 (m/min)	~5 (m/min)	3~12 (m/min)
25~35HRC						

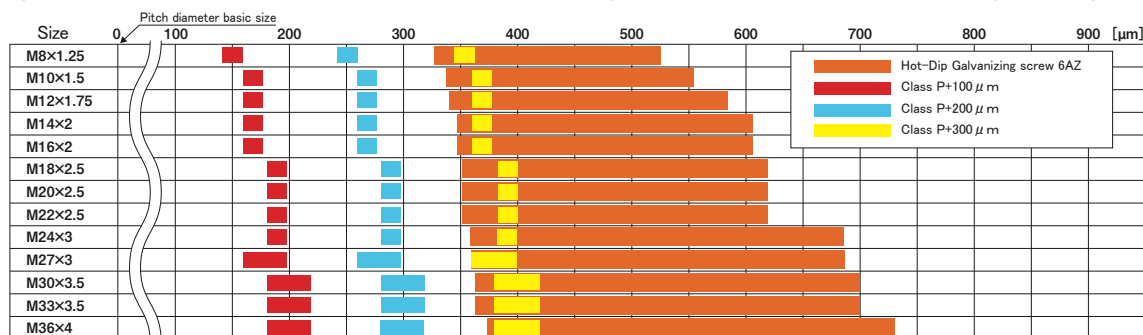
Product Features

- 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 HVPO (Hybrid Value Pointed 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

HVPO 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, HVPO 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 x 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 HVPO 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 HVPO ZP, we have prepared standard options of class P+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

It is recommended to drill a larger tap drill hole before zinc plating, taking into account the plating thickness.

Please refer to the following, and confirm the final dimensions.

unit: mm

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	6.95	7.05	7.15	6.647
M10 × 1.5	8.70	8.80	8.90	8.376
M12 × 1.75	10.5	10.6	10.7	10.106
M14 × 2	12.2	12.3	12.4	11.835
M16 × 2	14.2	14.3	14.4	13.835
M18 × 2.5	15.7	15.8	15.9	15.294
M20 × 2.5	17.7	17.8	17.9	17.294
M22 × 2.5	19.7	19.8	19.9	19.294
M24 × 3	21.2	21.3	21.4	20.752
M27 × 3	24.2	24.3	24.4	23.752
M30 × 3.5	26.7	26.8	26.9	26.211
M33 × 3.5	29.7	29.8	29.9	29.211
M36 × 4	32.2	32.3	32.4	31.670

JIS

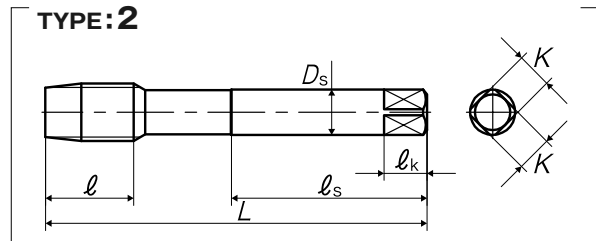
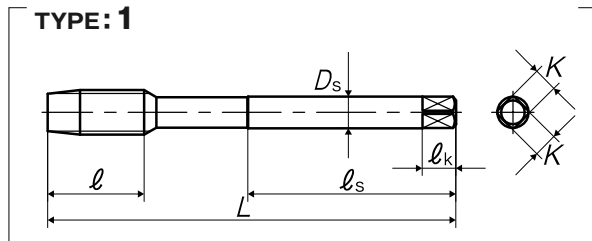
③-25

Think threads with
YAMAWA

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

3

JIS



Segment : 1C

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads												
M8 × 1.25	P3+0.1	1122201064	5P	90	19	46	6.2	5	8	3	1	¥ 3,110
M8 × 1.25	P3+0.2	1122301064	5P	90	19	46	6.2	5	8	3	1	¥ 3,110
M8 × 1.25	P3+0.3	1122401064	5P	90	19	46	6.2	5	8	3	1	¥ 3,110
M10 × 1.5	P4+0.1	1122201078	5P	100	23	51	7	5.5	8	3	1	¥ 4,070
M10 × 1.5	P4+0.2	1122301078	5P	100	23	51	7	5.5	8	3	1	¥ 4,070
M10 × 1.5	P4+0.3	1122401078	5P	100	23	51	7	5.5	8	3	1	¥ 4,070
M12 × 1.75	P4+0.1	1122201088	5P	110	26	56	8.5	6.5	9	3	1	¥ 5,460
M12 × 1.75	P4+0.2	1122301088	5P	110	26	56	8.5	6.5	9	3	1	¥ 5,460
M12 × 1.75	P4+0.3	1122401088	5P	110	26	56	8.5	6.5	9	3	1	¥ 5,460
M14 × 2	P4+0.1	1122201100	5P	110	26	56	10.5	8	11	3	1	¥ 7,480
M14 × 2	P4+0.2	1122301100	5P	110	26	56	10.5	8	11	3	1	¥ 7,480
M14 × 2	P4+0.3	1122401100	5P	110	26	56	10.5	8	11	3	1	¥ 7,480
M16 × 2	P4+0.1	1122201114	5P	110	26	56	12.5	10	13	3	1	¥ 9,970
M16 × 2	P4+0.2	1122301114	5P	110	26	56	12.5	10	13	3	1	¥ 9,970
M16 × 2	P4+0.3	1122401114	5P	110	26	56	12.5	10	13	3	1	¥ 9,970
M18 × 2.5	P5+0.1	1122201128	5P	125	33	64	14	11	14	3	1	¥ 13,400
M18 × 2.5	P5+0.2	1122301128	5P	125	33	64	14	11	14	3	1	¥ 13,400
M18 × 2.5	P5+0.3	1122401128	5P	125	33	64	14	11	14	3	1	¥ 13,400
M20 × 2.5	P5+0.1	1122201141	5P	140	33	71	15	12	15	3	2	¥ 18,200
M20 × 2.5	P5+0.2	1122301141	5P	140	33	71	15	12	15	3	2	¥ 18,200
M20 × 2.5	P5+0.3	1122401141	5P	140	33	71	15	12	15	3	2	¥ 18,200
M22 × 2.5	P5+0.1	1122201156	5P	140	33	71	17	13	16	3	2	¥ 23,000
M22 × 2.5	P5+0.2	1122301156	5P	140	33	71	17	13	16	3	2	¥ 23,000
M22 × 2.5	P5+0.3	1122401156	5P	140	33	71	17	13	16	3	2	¥ 23,000
M24 × 3	P5+0.1	1122201167	5P	160	37	82	19	15	18	3	2	¥ 28,700
M24 × 3	P5+0.2	1122301167	5P	160	37	82	19	15	18	3	2	¥ 28,700
M24 × 3	P5+0.3	1122401167	5P	160	37	82	19	15	18	3	2	¥ 28,700
M27 × 3	P5+0.1	1122201186	5P	160	37	82	20	15	18	4	2	¥ 40,700
M27 × 3	P5+0.2	1122301186	5P	160	37	82	20	15	18	4	2	¥ 40,700
M27 × 3	P5+0.3	1122401186	5P	160	37	82	20	15	18	4	2	¥ 40,700
M30 × 3.5	P5+0.1	1122201199	5P	180	44	92	23	17	20	4	2	¥ 51,600
M30 × 3.5	P5+0.2	1122301199	5P	180	44	92	23	17	20	4	2	¥ 51,600
M30 × 3.5	P5+0.3	1122401199	5P	180	44	92	23	17	20	4	2	¥ 51,600
M33 × 3.5	P5+0.1	1122201211	5P	180	46	92	25	19	22	4	2	¥ 60,100
M33 × 3.5	P5+0.2	1122301211	5P	180	46	92	25	19	22	4	2	¥ 60,100
M33 × 3.5	P5+0.3	1122401211	5P	180	46	92	25	19	22	4	2	¥ 60,100
M36 × 4	P6+0.1	1122201225	5P	200	52	102	28	21	24	4	2	¥ 69,300
M36 × 4	P6+0.2	1122301225	5P	200	52	102	28	21	24	4	2	¥ 69,300
M36 × 4	P6+0.3	1122401225	5P	200	52	102	28	21	24	4	2	¥ 69,300

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

③ Spiral Pointed Tap Series for through 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

Z-PRO

HVPO ZP



Z-PRO

Hybrid Value Spiral Pointed Taps for Zinc Plating

Specification

HSS

OX
Oxide



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)

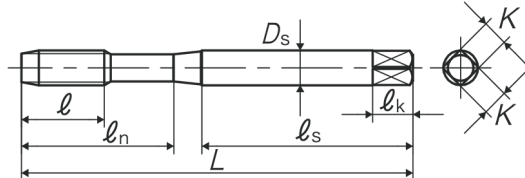
Cast steels
鋳鋼
3~12
(m/min)

25~35HRC

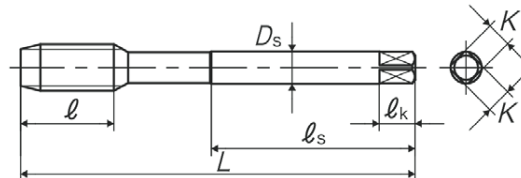
Product Features

- 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.

TYPE:1



TYPE:2



Segment : 1E

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												
M8 × 1.25	D7+.004	5122201064	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	1
M8 × 1.25	D7+.008	5122301064	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	1
M8 × 1.25	D7+.012	5122401064	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	1
M10 × 1.5	D7+.004	5122201078	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	1
M10 × 1.5	D7+.008	5122301078	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	1
M10 × 1.5	D7+.012	5122401078	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	1
M12 × 1.75	D8+.004	5122201088	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	2
M12 × 1.75	D8+.008	5122301088	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	2
M12 × 1.75	D8+.012	5122401088	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	2
M14 × 2	D8+.004	5122201100	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	2
M14 × 2	D8+.008	5122301100	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	2
M14 × 2	D8+.012	5122401100	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	2
M16 × 2	D8+.004	5122201114	5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	2
M16 × 2	D8+.008	5122301114	5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	2
M16 × 2	D8+.012	5122401114	5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	2
M18 × 2.5	D8+.004	5122201128	5P	4.921	1.299	-	2.52	0.542	0.406	0.625	3	2
M18 × 2.5	D8+.008	5122301128	5P	4.921	1.299	-	2.52	0.542	0.406	0.625	3	2

ANSI

③-27

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

3

ANSI

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M18 × 2.5	D8+.012	5122401128	5P	4.921	1.299	-	2.52	0.542	0.406	0.625	3	2
M20 × 2.5	D8+.004	5122201141	5P	5.512	1.299	-	2.795	0.652	0.489	0.687	3	2
M20 × 2.5	D8+.008	5122301141	5P	5.512	1.299	-	2.795	0.652	0.489	0.687	3	2
M20 × 2.5	D8+.012	5122401141	5P	5.512	1.299	-	2.795	0.652	0.489	0.687	3	2
M22 × 2.5	D8+.004	5122201156	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	2
M22 × 2.5	D8+.008	5122301156	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	2
M22 × 2.5	D8+.012	5122401156	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	2
M24 × 3	D9+.004	5122201167	5P	6.299	1.457	-	3.228	0.76	0.57	0.75	3	2
M24 × 3	D9+.008	5122301167	5P	6.299	1.457	-	3.228	0.76	0.57	0.75	3	2
M24 × 3	D9+.012	5122401167	5P	6.299	1.457	-	3.228	0.76	0.57	0.75	3	2
M27 × 3	D9+.004	5122201186	5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	2
M27 × 3	D9+.008	5122301186	5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	2
M27 × 3	D9+.012	5122401186	5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	2
M30 × 3.5	D10+.004	5122201199	5P	7.087	1.732	-	3.622	1.021	0.766	1	4	2
M30 × 3.5	D10+.008	5122301199	5P	7.087	1.732	-	3.622	1.021	0.766	1	4	2
M30 × 3.5	D10+.012	5122401199	5P	7.087	1.732	-	3.622	1.021	0.766	1	4	2
M33 × 3.5	D10+.004	5122201211	5P	7.087	1.732	-	3.622	1.108	0.831	1.062	4	2
M33 × 3.5	D10+.008	5122301211	5P	7.087	1.732	-	3.622	1.108	0.831	1.062	4	2
M33 × 3.5	D10+.012	5122401211	5P	7.087	1.732	-	3.622	1.108	0.831	1.062	4	2
M36 × 4	D10+.004	5122201225	5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	2
M36 × 4	D10+.008	5122301225	5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	2
M36 × 4	D10+.012	5122401225	5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	2

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

③-28

③ Spiral Pointed Tap Series for through 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

③-29



PO Spiral Pointed Taps



Specification

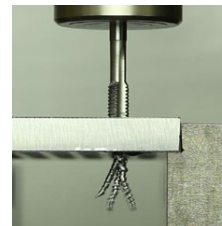


Tapping Speeds depending on Materials

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 from the tap's cutting chamfer are pushed forward. This is optimal for through hole tapping where there are no obstructions created by the chip.
- Straight flutes are shallow so the taps strength is very high.



Chips discharge of a PO tap

Comparison of a PO and + PO tap

PO For low-speed machining on drilling machines and CNC machining centers

Standard tap series PO for through holes.

Old Name	New Name	Size Range
N-PO	PO	M1.2 ~ M50

The PO and +PO use similar wording but have different meanings.

+PO For CNC Machining center at medium speed machining. Synchronous feed is recommended.

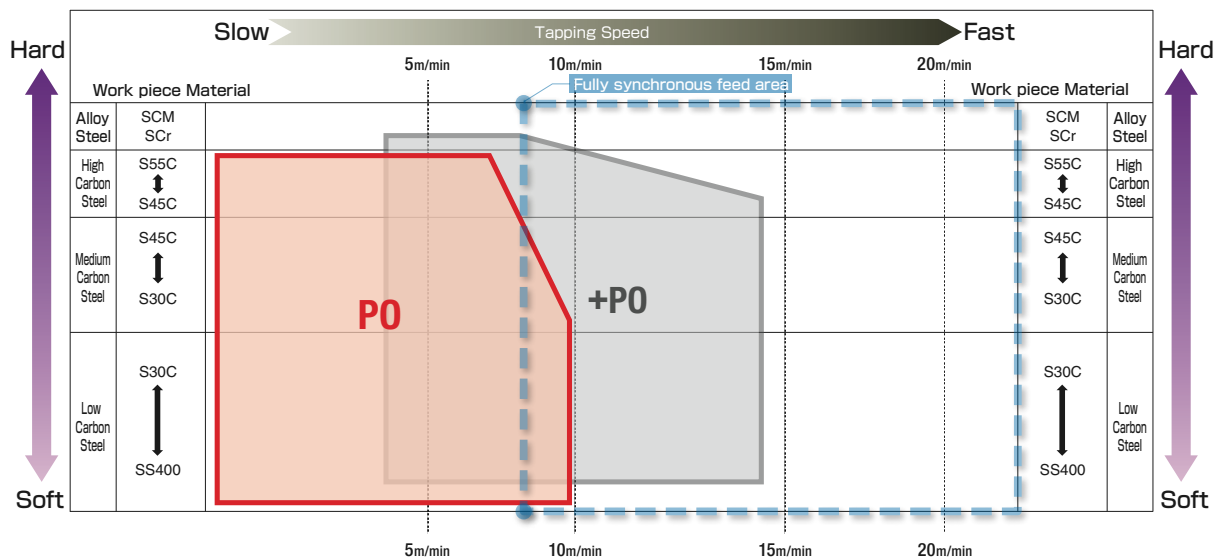
Plus series + PO for through holes.

Old Name	New Name	Size Range
N+PO	+PO	M3 ~ M6

The PO and +PO use similar wording but have different meanings.

- Both are general-purpose spiral point taps developed for the processing environment of our customers.

Application chart



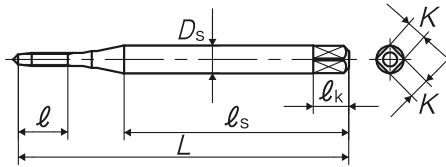
It is an image diagram of a processable range.

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

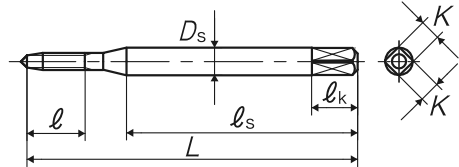
3

JIS

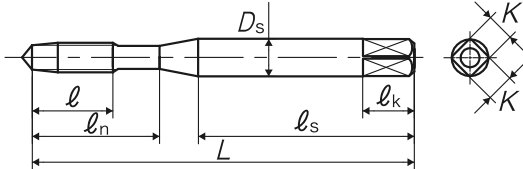
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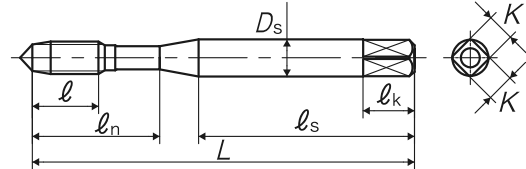
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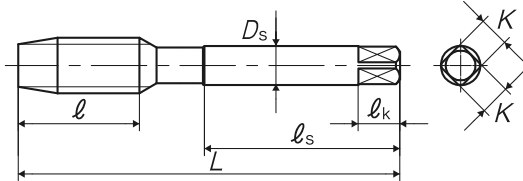
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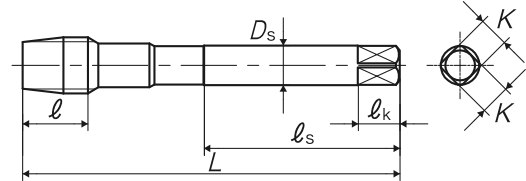
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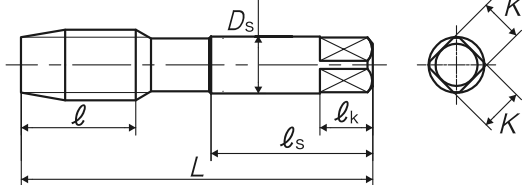
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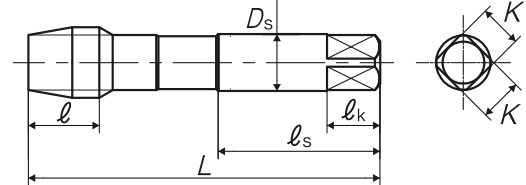
TYPE:6



TYPE:7



TYPE:8



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

③-30

③ Spiral Pointed Tap Series for through 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

PO Spiral Pointed Taps

Segment : 1E

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	POP1.2B	5P	36	4.5	-	24	3	2.5	5	2	1	¥ 4,300
M1.4 × 0.3	P1	POP1.4C	5P	36	5.4	-	24	3	2.5	5	2	1	¥ 3,520
M1.4 × 0.3	P2	POQ1.4C	5P	36	5.4	-	24	3	2.5	5	2	1	¥ 3,520
M1.4 × 0.3	P3	POR1.4C	5P	36	5.4	-	24	3	2.5	5	2	1	¥ 3,520 ※
M1.6 × 0.35	P2	POQ1.6D	5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,360
M1.6 × 0.35	P3	POR1.6D	5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,360 ※
M1.7 × 0.35	P2	POQ1.7D	5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,360
M1.7 × 0.35	P3	POR1.7D	5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,360
M1.7 × 0.35	P4	POS1.7D	5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,360 ※
M1.8 × 0.35	P2	POQ1.8D	5P	42	6.3	-	27	3	2.5	5	2	2	¥ 3,360 ※
M2 × 0.4	P2	POQ2.0E	5P	42	7.2	12	27	3	2.5	5	3	3	¥ 2,530
M2 × 0.4	P3	POR2.0E	5P	42	7.2	12	27	3	2.5	5	3	3	¥ 2,680
M2 × 0.4	P4	POS2.0E	5P	42	7.2	12	27	3	2.5	5	3	3	¥ 2,680
M2 × 0.25	P1	POP2.0B	5P	42	4.5	12	27	3	2.5	5	3	4	¥ 4,110 ※
M2.2 × 0.45	P2	POQ2.2F	5P	42	8.1	12	27	3	2.5	5	3	3	¥ 2,440
M2.2 × 0.25	P2	POQ2.2B	5P	42	4.5	12	27	3	2.5	5	3	4	¥ 4,110 ※
M2.3 × 0.4	P2	POQ2.3E	5P	42	7.2	12	27	3	2.5	5	3	3	¥ 2,440
M2.3 × 0.4	P3	POR2.3E	5P	42	7.2	12	27	3	2.5	5	3	3	¥ 2,440
M2.3 × 0.4	P4	POS2.3E	5P	42	7.2	12	27	3	2.5	5	3	3	¥ 2,440 ※
M2.5 × 0.45	P2	POQ2.5F	5P	46	8.1	14	29	3	2.5	5	3	3	¥ 2,060
M2.5 × 0.45	P3	POR2.5F	5P	46	8.1	14	29	3	2.5	5	3	3	¥ 2,060
M2.5 × 0.45	P4	POS2.5F	5P	46	8.1	14	29	3	2.5	5	3	3	¥ 2,060 ※
M2.5 × 0.35	P2	POQ2.5D	5P	46	6.3	14	29	3	2.5	5	3	4	¥ 3,030 ※
M2.6 × 0.45	P2	POQ2.6F	5P	46	8.1	14	29	3	2.5	5	3	3	¥ 2,060
M2.6 × 0.45	P3	POR2.6F	5P	46	8.1	14	29	3	2.5	5	3	3	¥ 2,060
M2.6 × 0.45	P4	POS2.6F	5P	46	8.1	14	29	3	2.5	5	3	3	¥ 2,060 ※
M2.6 × 0.35	P2	POQ2.6D	5P	46	6.3	14	29	3	2.5	5	3	4	¥ 3,030 ※
M3 × 0.5	P2	POQ3.0G	5P	46	9	14	26	4	3.2	6	3	3	¥ 1,360
M3 × 0.5	P3	POR3.0G	5P	46	9	14	26	4	3.2	6	3	3	¥ 1,440
M3 × 0.5	P4	POS3.0G	5P	46	9	14	26	4	3.2	6	3	3	¥ 1,440
3M0.6	P2	POQ3.0H	5P	46	9	14	26	4	3.2	6	3	3	¥ 1,440 ※
M3 × 0.35	P2	POQ3.0D	5P	46	6.5	14	26	4	3.2	6	3	4	¥ 2,460 ※
M3.5 × 0.6	P2	POQ3.5H	5P	52	11	16	29	5	4	7	3	3	¥ 1,440
M3.5 × 0.6	P3	POR3.5H	5P	52	11	16	29	5	4	7	3	3	¥ 1,440 ※
M3.5 × 0.6	P4	POS3.5H	5P	52	11	16	29	5	4	7	3	3	¥ 1,440 ※
M3.5 × 0.35	P2	POQ3.5D	5P	52	6.5	16	29	5	4	7	3	4	¥ 2,460 ※
M4 × 0.7	P2	POQ4.0I	5P	52	11	17	29	5	4	7	3	3	¥ 1,360
M4 × 0.7	P3	POR4.0I	5P	52	11	17	29	5	4	7	3	3	¥ 1,440
M4 × 0.7	P4	POS4.0I	5P	52	11	17	29	5	4	7	3	3	¥ 1,440
4M0.75	P2	POQ4.0J	5P	52	11	17	29	5	4	7	3	3	¥ 1,440 ※
M4 × 0.5	P2	POQ4.0G	5P	52	9	17	29	5	4	7	3	4	¥ 2,110
M4.5 × 0.75	P2	POQ4.5J	5P	60	13	21	33	5.5	4.5	7	3	3	¥ 1,450 ※
M4.5 × 0.5	P2	POQ4.5G	5P	60	9	21	33	5.5	4.5	7	3	4	¥ 2,110 ※
M5 × 0.8	P2	POQ5.0K	5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,370
M5 × 0.8	P3	POR5.0K	5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,450
M5 × 0.8	P4	POS5.0K	5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,450
5M0.9	P2	POQ5.0L	5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,450 ※
M5 × 0.5	P2	POQ5.0G	5P	60	9	22	33	5.5	4.5	7	3	4	¥ 2,110

JIS

③-31

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

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M5.5 × 0.9	P2	POQ5.5L	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,600 ※
M5.5 × 0.5	P2	POQ5.5G	5P	62	9	26	33	6	4.5	7	3	4	¥ 2,250 ※
M6 × 1	P2	POQ6.0M	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,510
M6 × 1	P3	POR6.0M	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,600
M6 × 1	P4	POS6.0M	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,600
M6 × 0.75	P2	POQ6.0J	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,250
M6 × 0.75	P3	POR6.0J	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,250 ※
M6 × 0.75	P4	POS6.0J	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,250 ※
M6 × 0.5	P2	POQ6.0G	5P	62	9	26	33	6	4.5	7	3	4	¥ 2,250 ※
M7 × 1	P2	POQ7.0M	5P	70	19	-	36	6.2	5	8	3	5	¥ 1,940
M7 × 1	P3	POR7.0M	5P	70	19	-	36	6.2	5	8	3	5	¥ 1,940 ※
M7 × 0.75	P2	POQ7.0J	5P	70	19	-	36	6.2	5	8	3	5	¥ 2,870 ※
M7 × 0.75	P3	POR7.0J	5P	70	19	-	36	6.2	5	8	3	5	¥ 2,870 ※
M7 × 0.5	P2	POQ7.0G	5P	70	10	-	36	6.2	5	8	3	6	¥ 3,580 ※
M8 × 1.25	P3	POR8.0N	5P	70	19	-	36	6.2	5	8	3	5	¥ 2,100
M8 × 1.25	P4	POS8.0N	5P	70	19	-	36	6.2	5	8	3	5	¥ 2,230
M8 × 1	P3	POR8.0M	5P	70	19	-	36	6.2	5	8	3	5	¥ 2,530
M8 × 1	P4	POS8.0M	5P	70	19	-	36	6.2	5	8	3	5	¥ 2,530 ※
M8 × 0.75	P3	POR8.0J	5P	70	19	-	36	6.2	5	8	3	5	¥ 2,870
M8 × 0.5	P2	POQ8.0G	5P	70	10	-	36	6.2	5	8	3	6	¥ 3,580 ※
M9 × 1.25	P3	POR9.0N	5P	75	23	-	38	7	5.5	8	3	5	¥ 2,840 ※
M9 × 1	P3	POR9.0M	5P	75	23	-	38	7	5.5	8	3	5	¥ 3,370 ※
M9 × 0.75	P3	POR9.0J	5P	75	13	-	38	7	5.5	8	3	6	¥ 4,100 ※
M9 × 0.5	P2	POQ9.0G	5P	75	11	-	38	7	5.5	8	3	6	¥ 4,460 ※
M10 × 1.5	P3	POR10.0O	5P	75	23	-	38	7	5.5	8	3	5	¥ 2,670
M10 × 1.5	P4	POS10.0O	5P	75	23	-	38	7	5.5	8	3	5	¥ 2,840
M10 × 1.5	P5	POT10.0O	5P	75	23	-	38	7	5.5	8	3	5	¥ 2,840 ※
M10 × 1.25	P3	POR10.0N	5P	75	23	-	38	7	5.5	8	3	5	¥ 2,670
M10 × 1.25	P4	POS10.0N	5P	75	23	-	38	7	5.5	8	3	5	¥ 2,840 ※
M10 × 1	P3	POR10.0M	5P	75	23	-	38	7	5.5	8	3	5	¥ 3,370
M10 × 1	P4	POS10.0M	5P	75	23	-	38	7	5.5	8	3	5	¥ 3,370 ※
M10 × 0.75	P3	POR10.0J	5P	75	13	-	38	7	5.5	8	3	6	¥ 4,100 ※
M10 × 0.5	P2	POQ10.0G	5P	75	11	-	38	7	5.5	8	3	6	¥ 4,460 ※
M11 × 1.5	P4	POS11.0O	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,020 ※
M11 × 1.25	P3	POR11.0N	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,020 ※
M11 × 1	P3	POR11.0M	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,730 ※
M11 × 0.75	P3	POR11.0J	5P	82	14	-	42	8.5	6.5	9	3	6	¥ 6,030 ※
M11 × 0.5	P2	POQ11.0G	5P	82	12	-	42	8.5	6.5	9	3	6	¥ 6,030 ※
M12 × 1.75	P4	POS12.0P	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 3,780
M12 × 1.75	P5	POT12.0P	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,020 ※
M12 × 1.75	P6	POU12.0P	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,020 ※
M12 × 1.5	P3	POR12.0O	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 3,780
M12 × 1.5	P4	POS12.0O	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,020 ※
M12 × 1.5	P5	POT12.0O	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,020 ※
M12 × 1.25	P4	POS12.0N	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 3,780
M12 × 1.25	P5	POT12.0N	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,020 ※
M12 × 1	P3	POR12.0M	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,730
M12 × 1	P4	POS12.0M	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,730 ※
M12 × 0.75	P3	POR12.0J	5P	82	14	-	42	8.5	6.5	9	3	6	¥ 6,030 ※
M12 × 0.5	P2	POQ12.0G	5P	82	12	-	42	8.5	6.5	9	3	6	¥ 6,030 ※

※ = 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

③-32

③ Spiral Pointed Tap Series for through 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

PO Spiral Pointed Taps

	Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
① Spiral Fluted Taps (for blind hole)	M13 × 1.75	P4	POS013P	5P	88	26	-	45	10.5	8	11	3	5	¥ 6,360 ※
	M13 × 1.5	P3	POR013O	5P	88	26	-	45	10.5	8	11	3	5	¥ 6,360 ※
	M13 × 1	P3	POR013M	5P	88	26	-	45	10.5	8	11	3	5	¥ 6,360 ※
② Spiral Fluted Taps (for through hole)	M13 × 0.75	P3	POR013J	5P	88	14	-	45	10.5	8	11	3	6	¥ 8,140 ※
	M13 × 0.5	P2	POQ013G	5P	88	12	-	45	10.5	8	11	3	6	¥ 8,140 ※
	M14 × 2	P4	POS014Q	5P	88	26	-	45	10.5	8	11	3	5	¥ 5,480
③ Spiral Pointed Taps (for through hole)	M14 × 2	P5	POT014Q	5P	88	26	-	45	10.5	8	11	3	5	¥ 5,480 ※
	M14 × 1.5	P3	POR014O	5P	88	26	-	45	10.5	8	11	3	5	¥ 5,480 ※
	M14 × 1.5	P4	POS014O	5P	88	26	-	45	10.5	8	11	3	5	¥ 5,480 ※
④ Hand Taps	M14 × 1.5	P5	POT014O	5P	88	26	-	45	10.5	8	11	3	5	¥ 5,480 ※
	M14 × 1.25	P3	POR014N	5P	88	26	-	45	10.5	8	11	3	5	¥ 6,360 ※
	M14 × 1	P3	POR014M	5P	88	26	-	45	10.5	8	11	3	5	¥ 6,360 ※
⑤ Cemented Carbide Taps	M14 × 1	P4	POS014M	5P	88	26	-	45	10.5	8	11	3	5	¥ 6,360 ※
	M14 × 0.75	P3	POR014J	5P	88	15	-	45	10.5	8	11	3	6	¥ 8,140 ※
	M14 × 0.5	P2	POQ014G	5P	88	12	-	45	10.5	8	11	3	6	¥ 8,140 ※
⑥ Roll Taps	M15 × 2	P4	POS015Q	5P	95	26	-	48	12.5	10	13	3	5	¥ 7,320 ※
	M15 × 1.5	P3	POR015O	5P	95	26	-	48	12.5	10	13	3	5	¥ 7,320 ※
	M15 × 1	P3	POR015M	5P	95	26	-	48	12.5	10	13	3	5	¥ 8,730 ※
⑦ Special Thread Taps Simple Inspection tools	M16 × 2	P4	POS016Q	5P	95	26	-	48	12.5	10	13	3	5	¥ 6,890
	M16 × 2	P5	POT016Q	5P	95	26	-	48	12.5	10	13	3	5	¥ 7,320 ※
	M16 × 2	P6	POU016Q	5P	95	26	-	48	12.5	10	13	3	5	¥ 7,320 ※
⑧ Pipe Taps	M16 × 1.5	P3	POR016O	5P	95	26	-	48	12.5	10	13	3	5	¥ 6,890
	M16 × 1.5	P4	POS016O	5P	95	26	-	48	12.5	10	13	3	5	¥ 7,320 ※
	M16 × 1.5	P5	POT016O	5P	95	26	-	48	12.5	10	13	3	5	¥ 7,320 ※
⑨ Thread Mills Premium Thread Mills	M16 × 1.25	P3	POR016N	5P	95	26	-	48	12.5	10	13	3	5	¥ 8,730 ※
	M16 × 1	P3	POR016M	5P	95	26	-	48	12.5	10	13	3	5	¥ 8,730 ※
	M17 × 1.5	P4	POS017O	5P	100	33	-	51	14	11	14	3	5	¥ 9,780 ※
⑩ Dies	M17 × 1	P4	POS017M	5P	100	18	-	51	14	11	14	3	6	¥ 12,700 ※
	M18 × 2.5	P4	POS018R	5P	100	33	-	51	14	11	14	3	5	¥ 9,780
	M18 × 2.5	P5	POT018R	5P	100	33	-	51	14	11	14	3	5	¥ 9,780 ※
⑪ Center Drills Centering Tools	M18 × 2	P4	POS018Q	5P	100	33	-	51	14	11	14	3	5	¥ 9,780 ※
	M18 × 1.5	P4	POS018O	5P	100	33	-	51	14	11	14	3	5	¥ 9,780 ※
	M18 × 1.5	P5	POT018O	5P	100	33	-	51	14	11	14	3	5	¥ 9,780 ※
⑫ Precision Machinery/ Medical Surgical Instruments	M18 × 1.25	P3	POR018N	5P	100	33	-	51	14	11	14	3	5	¥ 12,700 ※
	M18 × 1	P3	POR018M	5P	100	18	-	51	14	11	14	3	6	¥ 12,700
	M19 × 1.5	P4	POS019O	5P	105	33	-	50	15	12	15	3	7	¥ 13,400 ※
	M19 × 1	P3	POR019M	5P	105	18	-	50	15	12	15	3	8	¥ 17,000 ※
	M20 × 2.5	P4	POS020R	5P	105	33	-	50	15	12	15	3	7	¥ 13,400 ※
	M20 × 2.5	P5	POT020R	5P	105	33	-	50	15	12	15	3	7	¥ 13,400 ※
	M20 × 2.5	P6	POU020R	5P	105	33	-	50	15	12	15	3	7	¥ 13,400 ※
	M20 × 2	P4	POS020Q	5P	105	33	-	50	15	12	15	3	7	¥ 13,400 ※
	M20 × 1.5	P4	POS020O	5P	105	33	-	50	15	12	15	3	7	¥ 13,400 ※
	M20 × 1.5	P5	POT020O	5P	105	33	-	50	15	12	15	3	7	¥ 13,400 ※
	M20 × 1	P3	POR020M	5P	105	18	-	50	15	12	15	3	8	¥ 17,000
	M22 × 2.5	P4	POS022R	5P	115	33	-	55	17	13	16	3	7	¥ 17,100
	M22 × 2.5	P5	POT022R	5P	115	33	-	55	17	13	16	3	7	¥ 17,100 ※
	M22 × 2	P4	POS022Q	5P	115	33	-	55	17	13	16	3	7	¥ 17,100 ※
	M22 × 1.5	P4	POS022O	5P	115	33	-	55	17	13	16	3	7	¥ 17,100 ※
	M22 × 1.5	P5	POT022O	5P	115	33	-	55	17	13	16	3	7	¥ 17,100 ※
	M22 × 1	P3	POR022M	5P	115	19	-	55	17	13	16	3	8	¥ 22,100 ※

JIS

③-33

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

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M24 × 3	P4	POS024S	5P	120	39	-	55	19	15	18	3	7	¥ 21,300
M24 × 3	P5	POT024S	5P	120	39	-	55	19	15	18	3	7	¥ 21,300 ※
M24 × 3	P6	POU024S	5P	120	39	-	55	19	15	18	3	7	¥ 21,300 ※
M24 × 2	P4	POS024Q	5P	120	39	-	55	19	15	18	3	7	¥ 21,300
M24 × 1.5	P4	POS024O	5P	120	39	-	55	19	15	18	3	7	¥ 21,300
M24 × 1.5	P5	POT024O	5P	120	39	-	55	19	15	18	3	7	¥ 21,300 ※
M24 × 1	P3	POR024M	5P	120	19	-	55	19	15	18	3	8	¥ 27,200 ※
M25 × 2	P4	POS025Q	5P	125	39	-	58	19	15	18	3	7	¥ 27,800 ※
M25 × 1.5	P4	POS025O	5P	125	39	-	58	19	15	18	3	7	¥ 27,800
M25 × 1	P3	POR025M	5P	125	20	-	58	19	15	18	3	8	¥ 32,900 ※
M26 × 3	P4	POS026S	5P	130	39	-	60	20	15	18	4	7	¥ 29,900 ※
M26 × 2	P4	POS026Q	5P	130	39	-	60	20	15	18	4	7	¥ 29,900 ※
M26 × 1.5	P4	POS026O	5P	130	39	-	60	20	15	18	4	7	¥ 29,900
M26 × 1	P3	POR026M	5P	130	20	-	60	20	15	18	4	8	¥ 36,800 ※
M27 × 3	P4	POS027S	5P	130	39	-	60	20	15	18	4	7	¥ 29,900
M27 × 2	P4	POS027Q	5P	130	39	-	60	20	15	18	4	7	¥ 29,900 ※
M27 × 1.5	P4	POS027O	5P	130	39	-	60	20	15	18	4	7	¥ 29,900
M27 × 1	P3	POR027M	5P	130	20	-	60	20	15	18	4	8	¥ 36,800 ※
M28 × 2	P4	POS028Q	5P	135	46	-	62	23	17	20	4	7	¥ 38,100 ※
M28 × 1.5	P4	POS028O	5P	135	46	-	62	23	17	20	4	7	¥ 38,100 ※
M28 × 1	P3	POR028M	5P	135	20	-	62	23	17	20	4	8	¥ 47,600 ※
M30 × 3.5	P5	POT030T	5P	135	46	-	62	23	17	20	4	7	¥ 38,100
M30 × 3	P4	POS030S	5P	135	46	-	62	23	17	20	4	7	¥ 38,100 ※
M30 × 2	P4	POS030Q	5P	135	46	-	62	23	17	20	4	7	¥ 38,100
M30 × 1.5	P4	POS030O	5P	135	46	-	62	23	17	20	4	7	¥ 38,100
M30 × 1	P3	POR030M	5P	135	21	-	62	23	17	20	4	8	¥ 47,600 ※
M32 × 3	P4	POMS032S	5P	145	46	-	67	24	19	22	4	7	¥ 44,300 ※
M32 × 2	P4	POMS032Q	5P	145	46	-	67	24	19	22	4	7	¥ 44,300 ※
M32 × 1.5	P4	POMS032O	5P	145	46	-	67	24	19	22	4	7	¥ 44,300 ※
M33 × 3.5	P5	POMT033T	5P	145	46	-	67	25	19	22	4	7	¥ 44,300
M33 × 3	P4	POMS033S	5P	145	46	-	67	25	19	22	4	7	¥ 44,300 ※
M33 × 2	P4	POMS033Q	5P	145	46	-	67	25	19	22	4	7	¥ 44,300 ※
M33 × 1.5	P4	POMS033O	5P	145	46	-	67	25	19	22	4	7	¥ 44,300 ※
M34 × 2	P4	POMS034Q	5P	155	52	-	71	28	21	24	4	7	¥ 51,300 ※
M34 × 1.5	P4	POMS034O	5P	155	26	-	71	28	21	24	4	8	¥ 51,300 ※
M35 × 2	P4	POMS035Q	5P	155	52	-	71	28	21	24	4	7	¥ 51,300 ※
M35 × 1.5	P4	POMS035O	5P	155	26	-	71	28	21	24	4	8	¥ 51,300 ※
M36 × 4	P5	POMT036U	5P	155	52	-	71	28	21	24	4	7	¥ 51,300
M36 × 3	P4	POMS036S	5P	155	52	-	71	28	21	24	4	7	¥ 51,300 ※
M36 × 2	P4	POMS036Q	5P	155	52	-	71	28	21	24	4	7	¥ 51,300 ※
M36 × 1.5	P4	POMS036O	5P	155	26	-	71	28	21	24	4	8	¥ 51,300 ※
M38 × 2	P4	POMS038Q	5P	165	52	-	76	30	23	26	4	7	¥ 58,800 ※
M38 × 1.5	P4	POMS038O	5P	165	26	-	76	30	23	26	4	8	¥ 58,800 ※
M39 × 4	P5	POMT039U	5P	165	52	-	76	30	23	26	4	7	¥ 58,800 ※
M39 × 3	P4	POMS039S	5P	165	52	-	76	30	23	26	4	7	¥ 58,800 ※
M39 × 2	P4	POMS039Q	5P	165	52	-	76	30	23	26	4	7	¥ 58,800 ※
M39 × 1.5	P4	POMS039O	5P	165	26	-	76	30	23	26	4	8	¥ 58,800 ※
M40 × 3	P4	POMS040S	5P	175	59	-	81	32	26	30	4	7	¥ 71,500 ※
M40 × 2	P4	POMS040Q	5P	175	59	-	81	32	26	30	4	7	¥ 71,500 ※
M40 × 1.5	P4	POMS040O	5P	175	27	-	81	32	26	30	4	8	¥ 71,500 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

3

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

③-34

③ Spiral Pointed Tap Series for through 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

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M42 × 4.5	P5	POMT042V	5P	175	59	-	81	32	26	30	4	7	¥ 71,500 ※
M42 × 3	P4	POMS042S	5P	175	59	-	81	32	26	30	4	7	¥ 71,500 ※
M42 × 2	P4	POMS042Q	5P	175	59	-	81	32	26	30	4	7	¥ 71,500 ※
M42 × 1.5	P4	POMS042O	5P	175	27	-	81	32	26	30	4	8	¥ 71,500 ※
M45 × 4.5	P5	POMT045V	5P	180	59	-	83	35	26	30	4	7	¥ 82,800 ※
M45 × 3	P4	POMS045S	5P	180	59	-	83	35	26	30	4	7	¥ 82,800 ※
M45 × 2	P4	POMS045Q	5P	180	59	-	83	35	26	30	4	7	¥ 82,800 ※
M45 × 1.5	P4	POMS045O	5P	180	27	-	83	35	26	30	4	8	¥ 82,800 ※
M48 × 5	P5	POMT048W	5P	185	65	-	85	38	29	32	4	7	¥ 104,000 ※
M48 × 4	P5	POMT048U	5P	185	65	-	85	38	29	32	4	7	¥ 104,000 ※
M48 × 3	P4	POMS048S	5P	185	65	-	85	38	29	32	4	7	¥ 104,000 ※
M48 × 2	P4	POMS048Q	5P	185	65	-	85	38	29	32	4	7	¥ 104,000 ※
M48 × 1.5	P4	POMS048O	5P	185	28	-	85	38	29	32	4	8	¥ 104,000 ※
M50 × 1.5	P4	POS050O	5P	145	45	-	81	40	32	35	4	7	¥ 113,000 ※
For Unified Threads													
No.0-80UNF	P1	POPUN0B	5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,980 ※
No.1-64UNC	P1	POPUN1D	5P	42	7.2	-	27	3	2.5	5	2	2	¥ 3,980 ※
No.1-72UNF	P1	POPUN1C	5P	42	7.2	-	27	3	2.5	5	2	2	¥ 3,980 ※
No.2-56UNC	P1	POPUN2E	5P	42	8.1	12	27	3	2.5	5	3	3	¥ 2,810
No.2-64UNF	P1	POPUN2D	5P	42	8.1	12	27	3	2.5	5	3	3	¥ 2,810 ※
No.3-48UNC	P1	POPUN3F	5P	46	8.1	14	29	3	2.5	5	3	3	¥ 2,380 ※
No.3-56UNF	P1	POPUN3E	5P	46	8.1	14	29	3	2.5	5	3	3	¥ 2,380 ※
No.4-40UNC	P2	POQUN4H	5P	46	9	14	25	4	3.2	6	3	3	¥ 1,820
No.4-48UNF	P1	POPUN4F	5P	46	9	14	25	4	3.2	6	3	3	¥ 1,820 ※
No.5-40UNC	P2	POQUN5H	5P	52	11	16	28	5	4	7	3	3	¥ 1,690 ※
No.5-44UNF	P1	POPUN5G	5P	52	11	16	28	5	4	7	3	3	¥ 1,690 ※
No.6-32UNC	P2	POQUN6J	5P	52	11	17	27	5	4	7	3	3	¥ 1,690
No.6-40UNF	P2	POQUN6H	5P	52	11	17	27	5	4	7	3	3	¥ 1,690 ※
No.8-32UNC	P2	POQUN8J	5P	60	13	22	31	5.5	4.5	7	3	3	¥ 1,700
No.8-36UNF	P2	POQUN8I	5P	60	13	22	31	5.5	4.5	7	3	3	¥ 1,700 ※
No.10-24UNC	P2	POQUNAM	5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,700
No.10-32UNF	P2	POQUNAJ	5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,700
No.12-24UNC	P2	POQUNCM	5P	62	15	26	32	6	4.5	7	3	3	¥ 1,830 ※
No.12-28UNF	P2	POQUNCK	5P	62	15	26	32	6	4.5	7	3	3	¥ 1,830 ※
1/4-20UNC	P2	POQU04N	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,830
1/4-28UNF	P2	POQU04K	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,830
1/4-32UNEF	P2	POQU04J	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,710 ※
1/4-36UNS	P2	POQU04I	5P	62	15	26	33	6	4.5	7	3	3	¥ 3,150 ※
5/16-18UNC	P3	PORU05O	5P	70	19	-	36	6.2	5	8	3	5	¥ 2,570
5/16-24UNF	P2	POQU05M	5P	70	19	-	36	6.2	5	8	3	5	¥ 2,570
5/16-32UNEF	P2	POQU05J	5P	70	19	-	36	6.2	5	8	3	5	¥ 3,580 ※
3/8-16UNC	P3	PORU06P	5P	75	23	-	38	7	5.5	8	3	5	¥ 3,290
3/8-24UNF	P2	POQU06M	5P	75	23	-	38	7	5.5	8	3	5	¥ 3,290
3/8-32UNEF	P2	POQU06J	5P	75	13	-	38	7	5.5	8	3	6	¥ 4,100 ※
7/16-14UNC	P3	PORU07Q	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,630 ※
7/16-20UNF	P3	PORU07N	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,630
7/16-28UNEF	P2	POQU07K	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 6,030 ※
1/2-13UNC	P3	PORU08R	5P	88	26	-	45	10.5	8	11	3	5	¥ 4,910
1/2-20UNF	P3	PORU08N	5P	88	26	-	45	10.5	8	11	3	5	¥ 4,910

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

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
1/2-28UNEF	P2	POQU08K	5P	88	26	-	45	10.5	8	11	3	5	¥ 7,240 ※
9/16-12UNC	P3	PORU09S	5P	95	26	-	48	12.5	10	13	3	5	¥ 7,320 ※
9/16-18UNF	P3	PORU09O	5P	95	26	-	48	12.5	10	13	3	5	¥ 7,320
5/8-11UNC	P3	PORU10U	5P	95	26	-	48	12.5	10	13	3	5	¥ 7,320 ※
5/8-18UNF	P3	PORU10O	5P	95	26	-	48	12.5	10	13	3	5	¥ 7,320 ※
5/8-24UNEF	P3	PORU10M	5P	95	26	-	48	12.5	10	13	3	5	¥ 10,500 ※
3/4-10UNC	P4	POSU12V	5P	105	33	-	50	15	12	15	3	7	¥ 13,400 ※
3/4-16UNF	P3	PORU12P	5P	105	33	-	50	15	12	15	3	7	¥ 13,400
3/4-20UNEF	P3	PORU12N	5P	105	33	-	50	15	12	15	3	7	¥ 17,000 ※
7/8-9UNC	P4	POSU14W	5P	115	33	-	55	17	13	16	3	7	¥ 18,800 ※
7/8-14UNF	P3	PORU14Q	5P	115	33	-	55	17	13	16	3	7	¥ 18,800 ※
1 -8UNC	P4	POSU16X	5P	125	39	-	58	19	15	18	3	7	¥ 27,800 ※
1 -12UNF	P4	POSU16S	5P	125	39	-	58	19	15	18	3	7	¥ 27,800 ※
1 -14UNS	P4	POSU16Q	5P	125	39	-	58	19	15	18	3	7	¥ 36,800 ※
1 1/8-7UNC	P4	POSU18Y	5P	135	46	-	62	23	17	20	4	7	¥ 38,100 ※
1 1/8-8UN	P4	POSU18X	5P	135	46	-	62	23	17	20	4	7	¥ 45,600 ※
1 1/8-12UNF	P4	POSU18S	5P	135	46	-	62	23	17	20	4	7	¥ 38,100 ※
1 1/4-7UNC	P4	POMSU20Y	5P	145	46	-	67	24	19	22	4	7	¥ 44,300 ※
1 1/4-8UN	P4	POMSU20X	5P	145	46	-	67	24	19	22	4	7	¥ 53,100 ※
1 1/4-12UNF	P4	POMSU20S	5P	145	46	-	67	24	19	22	4	7	¥ 44,300 ※
1 3/8-6UNC	P5	POMTU22Z	5P	155	52	-	71	28	21	24	4	7	¥ 51,300 ※
1 3/8-8UN	P5	POMTU22X	5P	155	52	-	71	28	21	24	4	7	¥ 61,500 ※
1 3/8-12UNF	P4	POMSU22S	5P	155	52	-	71	28	21	24	4	7	¥ 51,300 ※
1 1/2-6UNC	P5	POMTU24Z	5P	165	52	-	76	30	23	26	4	7	¥ 73,400 ※
1 1/2-8UN	P5	POMTU24X	5P	165	52	-	76	30	23	26	4	7	¥ 73,400 ※
1 1/2-12UNF	P4	POMSU24S	5P	165	52	-	76	30	23	26	4	7	¥ 73,400 ※
2 -4 1/2UNC	P5	POTU329	5P	195	70	-	85	40	32	35	4	7	¥ 138,000 ※
2 -8UN	P5	POTU32X	5P	195	70	-	85	40	32	35	4	7	¥ 138,000 ※
2 -12UN	P5	POTU32S	5P	145	45	-	82	40	32	35	4	7	¥ 138,000 ※
For Whitworth Threads													
1/8W40	P2	POQW02H	5P	52	11	16	28	5	4	7	3	3	¥ 2,100 ※
5/32W32	P2	POQW2HJ	5P	52	11	17	29	5	4	7	3	3	¥ 1,690 ※
3/16W24	P2	POQW03M	5P	60	13	21	32	5.5	4.5	7	3	3	¥ 1,700
7/32W24	P2	POQW3HM	5P	62	15	26	32	6	4.5	7	3	3	¥ 1,830 ※
1/4W20	P3	PORW04N	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,830
5/16W18	P3	PORW05O	5P	70	19	-	36	6.2	5	8	3	5	¥ 2,570
3/8W16	P3	PORW06P	5P	75	23	-	38	7	5.5	8	3	5	¥ 3,290
7/16W14	P3	PORW07Q	5P	82	26	-	42	8.5	6.5	9	3	5	¥ 4,630 ※
1/2W12	P3	PORW08S	5P	88	26	-	45	10.5	8	11	3	5	¥ 4,910
9/16W12	P3	PORW09S	5P	95	26	-	48	12.5	10	13	3	5	¥ 7,320 ※
5/8W11	P3	PORW10U	5P	95	26	-	48	12.5	10	13	3	5	¥ 7,320
3/4W10	P4	POSW12V	5P	105	33	-	50	15	12	15	3	7	¥ 13,400
7/8W9	P4	POSW14W	5P	115	33	-	55	17	13	16	3	7	¥ 18,800 ※
1 W8	P4	POSW16X	5P	125	39	-	58	19	15	18	3	7	¥ 27,800 ※
1 1/8W7	P4	POSW18Y	5P	135	46	-	62	23	17	20	4	7	¥ 38,100 ※
1 1/4W7	P4	POMSW20Y	5P	145	46	-	67	24	19	22	4	7	¥ 44,300 ※
1 3/8W6	P5	POMTW22Z	5P	155	52	-	71	28	21	24	4	7	¥ 51,300 ※
1 1/2W6	P5	POMTW24Z	5P	165	52	-	76	30	23	26	4	7	¥ 73,400 ※
1 3/4W5	P5	POMTW280	5P	180	59	-	83	35	26	30	4	7	¥ 97,000 ※
2 W4 1/2	P5	POTW329	5P	195	70	-	85	40	32	35	4	7	¥ 138,000 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

3

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

③-36

③ Spiral Pointed Tap Series for through 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

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
For Screw Threads used on Sewing Machines													
3/32SM56	P1	POPS06E	5P	46	8.1	14	29	3	2.5	5	3	3	¥ 2,850 ※
1/8SM40	P2	POQS08H	5P	52	11	16	28	5	4	7	3	3	¥ 2,100 ※
1/8SM44	P2	POQS08G	5P	52	11	16	28	5	4	7	3	3	¥ 2,100 ※
9/64SM40	P2	POQS09H	5P	52	11	16	29	5	4	7	3	3	¥ 2,100 ※
11/64SM40	P2	POQS11H	5P	60	13	21	33	5.5	4.5	7	3	3	¥ 2,050 ※
3/16SM28	P2	POQS12K	5P	60	13	21	32	5.5	4.5	7	3	3	¥ 2,050 ※
3/16SM32	P2	POQS12J	5P	60	13	21	32	5.5	4.5	7	3	3	¥ 2,050 ※
7/32SM32	P2	POQS14J	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,190 ※
15/64SM28	P2	POQS15K	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,190 ※
1/4SM24	P2	POQS16M	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,190 ※
1/4SM40	P2	POQS16H	5P	62	8.6	26	33	6	4.5	7	3	4	¥ 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

③-37

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

Spiral Pointed Tap Series for through hole

ANSI

PO

Spiral Pointed Taps



Specification

HSS

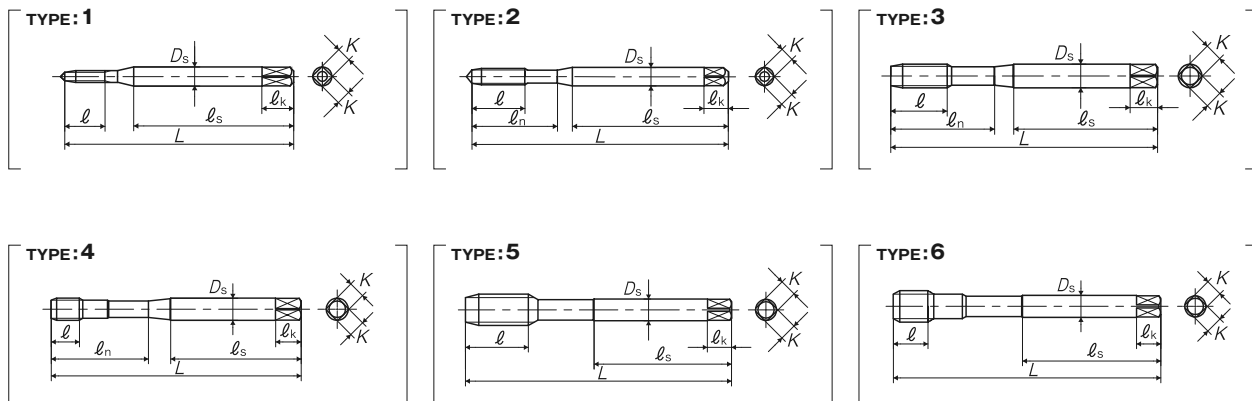


Tapping Speed depending on Materials

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

High carbon steels
高炭素鋼
5~10
(m/min)

■The PO taps push the chips forward and discharge them in the direction of tapping. These taps cut a stable thread with few problems due to chips, making them ideal for through hole machining.



Segment : 1E

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	PS2.0E3NEB	5P	1.772	0.314	-	1.161	0.141	0.11	0.187	3	1
M2.2 × 0.45	D3	PS2.2F3NEB	5P	1.772	0.314	-	1.161	0.141	0.11	0.187	3	1
M2.5 × 0.45	D3	PS2.5F3NEB	5P	2.205	0.354	0.693	1.28	0.141	0.11	0.187	3	2
M2.6 × 0.45	D3	PS2.6F3NEB	5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	3	2
M3 × 0.5	D3	PS3.0G3NEB	5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	3	2
M3.5 × 0.6	D4	PS3.5H4NEB	5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
M4 × 0.7	D4	PS4.0I4NEB	5P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	3	2
M5 × 0.8	D4	PS5.0K4NEB	5P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	3	2
M6 × 1	D5	PS6.0M5NEB	5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
M7 × 1	D5	PS7.0M5NEB	5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	3
M7 × 0.75	D4	PS7.0J4NEB	5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	3
M7 × 0.5	D4	PS7.0G4NEB	5P	3.543	0.394	1.339	1.831	0.318	0.238	0.375	3	4
M8 × 1.25	D5	PS8.0N5NEB	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 1	D5	PS8.0M5NEB	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 0.75	D4	PS8.0J4NEB	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 0.5	D4	PS8.0G4NEB	5P	3.543	0.394	1.378	1.831	0.318	0.238	0.375	3	4
M9 × 1.25	D5	PS9.0N5NEB	5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
M9 × 1	D5	PS9.0M5NEB	5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
M10 × 1.5	D6	PS10.0N6NEB	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 1.25	D5	PS10.0N5NEB	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3

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

3

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

③-38

Think threads with
YAMAWA

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

③ Spiral Pointed Tap Series for through 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

PO Spiral Pointed Taps

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	PS010M5NEB	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 0.75	D4	PS010J4NEB	5P	3.937	0.512	1.535	2.126	0.381	0.286	0.437	3	4
M11 × 1.5	D6	PS011O6NEB	5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
M12 × 1.75	D6	PS012P6NEB	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M12 × 1.5	D6	PS012O6NEB	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M12 × 1.25	D6	PS012N6NEB	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M12 × 1	D5	PS012M5NEB	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M14 × 2	D7	PS014Q7NEB	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M14 × 1.5	D6	PS014O6NEB	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M14 × 1.25	D6	PS014N6NEB	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M14 × 1	D5	PS014M5NEB	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M16 × 2	D7	PS016Q7NEB	5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
M16 × 1.5	D6	PS016O6NEB	5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
M16 × 1	D5	PS016M5NEB	5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
M18 × 2.5	D7	PS018R7NEB	5P	4.921	1.299	-	2.52	0.542	0.406	0.625	3	5
M18 × 2	D7	PS018Q7NEB	5P	4.921	1.299	-	2.52	0.542	0.406	0.625	3	5
M18 × 1.5	D6	PS018O6NEB	5P	4.921	0.945	-	2.52	0.542	0.406	0.625	3	6
M18 × 1	D5	PS018M5NEB	5P	4.921	0.945	-	2.52	0.542	0.406	0.625	3	6
M20 × 2.5	D7	PS020R7NEB	5P	5.512	1.299	-	2.795	0.652	0.489	0.687	3	5
M20 × 2	D7	PS020Q7NEB	5P	5.512	1.299	-	2.795	0.652	0.489	0.687	3	5
M20 × 1.5	D6	PS020O6NEB	5P	5.512	0.945	-	2.795	0.652	0.489	0.687	3	6
M20 × 1	D5	PS020M5NEB	5P	5.512	0.945	-	2.795	0.652	0.489	0.687	3	6
M22 × 2.5	D7	PS022R7NEB	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
M22 × 2	D7	PS022Q7NEB	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
M22 × 1.5	D6	PS022O6NEB	5P	5.512	0.945	-	2.795	0.697	0.523	0.75	3	6
M22 × 1	D5	PS022M5NEB	5P	5.512	0.945	-	2.795	0.697	0.523	0.75	3	6
M24 × 3	D8	PS024S8NEB	5P	6.299	1.457	-	3.228	0.76	0.57	0.75	3	5
M24 × 2	D7	PS024Q7NEB	5P	6.299	1.063	-	3.228	0.76	0.57	0.75	3	6
M24 × 1.5	D6	PS024O6NEB	5P	6.299	1.063	-	3.228	0.76	0.57	0.75	3	6
M24 × 1	D5	PS024M5NEB	5P	6.299	1.063	-	3.228	0.76	0.57	0.75	3	6
M25 × 1.5	D6	PS025O6NEB	5P	6.299	1.063	-	3.228	0.8	0.6	0.812	3	6
M26 × 1.5	D6	PS026O6NEB	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M27 × 3	D8	PS027S8NEB	5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
M27 × 2	D7	PS027Q7NEB	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M27 × 1.5	D6	PS027O6NEB	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M27 × 1	D5	PS027M5NEB	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M28 × 2	D7	PS028Q7NEB	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M28 × 1.5	D6	PS028O6NEB	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M28 × 1	D5	PS028M5NEB	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M30 × 3.5	D9	PS030T9NEB	5P	7.087	1.732	-	3.622	1.021	0.766	1	4	5
M30 × 2	D7	PS030Q7NEB	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	6
M30 × 1.5	D6	PS030O6NEB	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	6
M30 × 1	D5	PS030M5NEB	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	6
M32 × 2	D7	PS032Q7NEB	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M32 × 1.5	D6	PS032O6NEB	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M32 × 1	D5	PS032M5NEB	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M33 × 3.5	D9	PS033T9NEB	5P	7.087	1.732	-	3.622	1.108	0.831	1.062	4	5
M33 × 2	D7	PS033Q7NEB	5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	6
M33 × 1.5	D6	PS033O6NEB	5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	6
M33 × 1	D5	PS033M5NEB	5P	7.087	1.142	-	3.622	1.108	0.831	1.062	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

ANSI

③-39

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

PO Spiral Pointed Taps

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	PS036U9NEB	5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	5
M36 × 3	D8	PS036S8NEB	5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	5
M36 × 2	D7	PS036Q7NEB	5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	6
M36 × 1.5	D6	PS036O6NEB	5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	6
M36 × 1	D5	PS036M5NEB	5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	6
M39 × 4	D9	PS039U9NEB	5P	7.874	2.047	-	4.016	1.305	0.979	1.125	4	5
M39 × 3	D8	PS039S8NEB	5P	7.874	2.047	-	4.016	1.305	0.979	1.125	4	5
M39 × 2	D7	PS039Q7NEB	5P	7.874	1.142	-	4.016	1.305	0.979	1.125	4	6
M39 × 1.5	D6	PS039O6NEB	5P	7.874	1.142	-	4.016	1.305	0.979	1.125	4	6
M39 × 1	D5	PS039M5NEB	5P	7.874	1.142	-	4.016	1.305	0.979	1.125	4	6
M42 × 4.5	D10	PS042VONEB	5P	7.874	2.047	-	4.016	1.43	1.072	1.25	4	5
M42 × 2	D7	PS042Q7NEB	5P	7.874	1.142	-	4.016	1.43	1.072	1.25	4	6
M42 × 1.5	D6	PS042O6NEB	5P	7.874	1.142	-	4.016	1.43	1.072	1.25	4	6
M42 × 1	D5	PS042M5NEB	5P	7.874	1.142	-	4.016	1.43	1.072	1.25	4	6
M45 × 4.5	D10	PS045VONEB	5P	8.661	2.323	-	4.409	1.519	1.139	1.25	4	5
M45 × 3	D8	PS045S8NEB	5P	8.661	2.323	-	4.409	1.519	1.139	1.25	4	5
M45 × 2	D7	PS045Q7NEB	5P	8.661	1.22	-	4.409	1.519	1.139	1.25	4	6
M45 × 1.5	D6	PS045O6NEB	5P	8.661	1.22	-	4.409	1.519	1.139	1.25	4	6
M45 × 1	D5	PS045M5NEB	5P	8.661	1.22	-	4.409	1.519	1.139	1.25	4	6
M48 × 5	D11	PS048W-NEB	5P	9.843	2.559	-	5.039	1.644	1.233	1.375	4	5
M48 × 3	D9	PS048S9NEB	5P	9.843	2.559	-	5.039	1.644	1.233	1.375	4	5
M48 × 2	D7	PS048Q7NEB	5P	9.843	1.22	-	5.039	1.644	1.233	1.375	4	6
M48 × 1.5	D7	PS048O7NEB	5P	9.843	1.22	-	5.039	1.644	1.233	1.375	4	6
M48 × 1	D6	PS048M6NEB	5P	9.843	1.22	-	5.039	1.644	1.233	1.375	4	6
For Unified Threads												
No.0-80UNF	GH1	PSUN0B1NEB	5P	1.772	0.236	-	1.161	0.141	0.11	0.187	2	1
No.0-80UNF	GH2	PSUN0B2NEB	5P	1.772	0.236	-	1.161	0.141	0.11	0.187	2	1
No.1-64UNC	GH1	PSUN1D1NEB	5P	1.772	0.276	-	1.161	0.141	0.11	0.187	2	1
No.1-64UNC	GH2	PSUN1D2NEB	5P	1.772	0.276	-	1.161	0.141	0.11	0.187	2	1
No.1-72UNF	GH1	PSUN1C1NEB	5P	1.772	0.276	-	1.161	0.141	0.11	0.187	2	1
No.1-72UNF	GH2	PSUN1C2NEB	5P	1.772	0.276	-	1.161	0.141	0.11	0.187	2	1
No.2-56UNC	GH1	PSUN2E1NEB	5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.2-56UNC	GH2	PSUN2E2NEB	5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.2-64UNF	GH1	PSUN2D1NEB	5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.2-64UNF	GH2	PSUN2D2NEB	5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.3-48UNC	GH1	PSUN3F1NEB	5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.3-48UNC	GH2	PSUN3F2NEB	5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.3-56UNF	GH1	PSUN3E1NEB	5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.3-56UNF	GH2	PSUN3E2NEB	5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.4-40UNC	GH2	PSUN4H2NEB	5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.4-40UNC	GH3	PSUN4H3NEB	5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.4-48UNF	GH1	PSUN4F1NEB	5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.4-48UNF	GH2	PSUN4F2NEB	5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.5-40UNC	GH2	PSUN5H2NEB	5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-40UNC	GH3	PSUN5H3NEB	5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-44UNF	GH1	PSUN5G1NEB	5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-44UNF	GH2	PSUN5G2NEB	5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-44UNF	GH3	PSUN5G3NEB	5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.6-32UNC	GH2	PSUN6J2NEB	5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	2	2
No.6-32UNC	GH3	PSUN6J3NEB	5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	2	2

3

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

③-40

③ Spiral Pointed Tap Series for through 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

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
No.6-40UNF	GH2	PSUN6H2NEB	5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	2	2
No.6-40UNF	GH3	PSUN6H3NEB	5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	2	2
No.8-32UNC	GH2	PSUN8J2NEB	5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	2	2
No.8-32UNC	GH3	PSUN8J3NEB	5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	2	2
No.8-36UNF	GH2	PSUN8I2NEB	5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	2	2
No.8-36UNF	GH3	PSUN8I3NEB	5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	2	2
No.10-24UNC	GH2	PSUNAM2NEB	5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	2	2
No.10-24UNC	GH3	PSUNAM3NEB	5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	2	2
No.10-32UNF	GH2	PSUNAJ2NEB	5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	2	2
No.10-32UNF	GH3	PSUNAJ3NEB	5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	2	2
No.12-24UNC	GH2	PSUNCM2NEB	5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	2	2
No.12-24UNC	GH3	PSUNCM3NEB	5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	2	2
No.12-28UNF	GH2	PSUNCK2NEB	5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	2	2
No.12-28UNF	GH3	PSUNCK3NEB	5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	2	2
1/4-20UNC	GH3	PSU04N3NEB	4.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-20UNC	GH4	PSU04N4NEB	4.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-20UNC	GH5	PSU04N5NEB	4.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH2	PSU04K2NEB	4.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	PSU04K3NEB	4.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	PSU04K4NEB	4.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
5/16-18UNC	GH3	PSU05O3NEB	4.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-18UNC	GH4	PSU05O4NEB	4.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-18UNC	GH5	PSU05O5NEB	4.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	PSU05M3NEB	4.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	PSU05M4NEB	4.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	PSU06P3NEB	4.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-16UNC	GH5	PSU06P5NEB	4.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	PSU06M3NEB	4.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	PSU06M4NEB	4.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
7/16-14UNC	GH4	PSU07Q4NEB	4.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-14UNC	GH5	PSU07Q5NEB	4.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-20UNF	GH3	PSU07N3NEB	4.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-20UNF	GH4	PSU07N4NEB	4.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-20UNF	GH5	PSU07N5NEB	4.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
1/2-13UNC	GH3	PSU08R3NEB	4.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-13UNC	GH4	PSU08R4NEB	4.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-13UNC	GH5	PSU08R5NEB	4.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH3	PSU08N3NEB	4.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH4	PSU08N4NEB	4.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH5	PSU08N5NEB	4.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
9/16-12UNC	GH3	PSU09S3NEB	4.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-12UNC	GH4	PSU09S4NEB	4.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-12UNC	GH5	PSU09S5NEB	4.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-18UNF	GH3	PSU09O3NEB	4.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-18UNF	GH4	PSU09O4NEB	4.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-18UNF	GH5	PSU09O5NEB	4.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
5/8-11UNC	GH3	PSU10U3NEB	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-11UNC	GH4	PSU10U4NEB	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-11UNC	GH5	PSU10U5NEB	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-11UNC	GH6	PSU10U6NEB	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5

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③-41

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

3

ANSI

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
5/8-18UNF	GH3	PSU1003NEB	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-18UNF	GH4	PSU1004NEB	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-18UNF	GH5	PSU1005NEB	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
3/4-10UNC	GH5	PSU12V5NEB	4.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	3	5
3/4-10UNC	GH6	PSU12V6NEB	4.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	3	5
3/4-16UNF	GH3	PSU12P3NEB	4.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	3	5
3/4-16UNF	GH4	PSU12P4NEB	4.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	3	5
3/4-16UNF	GH5	PSU12P5NEB	4.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	3	5
7/8-9UNC	GH4	PSU14W4NEB	4.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
7/8-9UNC	GH5	PSU14W5NEB	4.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
7/8-9UNC	GH6	PSU14W6NEB	4.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
7/8-14UNF	GH4	PSU14Q4NEB	4.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
7/8-14UNF	GH6	PSU14Q6NEB	4.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
1 -8UNC	GH4	PSU16X4NEB	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 -8UNC	GH5	PSU16X5NEB	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 -8UNC	GH6	PSU16X6NEB	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 -8UNC	GH7	PSU16X7NEB	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 -12UNF	GH4	PSU16S4NEB	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 -12UNF	GH5	PSU16S5NEB	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 -12UNF	GH6	PSU16S6NEB	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 1/8-7UNC	GH6	PSU18Y6NEB	4.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/8-7UNC	GH7	PSU18Y7NEB	4.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/8-12UNF	GH5	PSU18S5NEB	4.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/8-12UNF	GH6	PSU18S6NEB	4.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/4-7UNC	GH6	PSU20Y6NEB	4.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 1/4-7UNC	GH8	PSU20Y8NEB	4.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 1/4-12UNF	GH5	PSU20S5NEB	4.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 1/4-12UNF	GH6	PSU20S6NEB	4.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 3/8-6UNC	GH6	PSU22Z6NEB	4.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 3/8-6UNC	GH8	PSU22Z8NEB	4.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 3/8-12UNF	GH5	PSU22S5NEB	4.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 3/8-12UNF	GH6	PSU22S6NEB	4.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 1/2-6UNC	GH6	PSU24Z6NEB	4.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5
1 1/2-6UNC	GH8	PSU24Z8NEB	4.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5
1 1/2-12UNF	GH5	PSU24S5NEB	4.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5
1 1/2-12UNF	GH7	PSU24S7NEB	4.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5

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

③-42

③ Spiral Pointed Tap Series for through 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

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

DIN

PO

Spiral Pointed Taps



Specification

HSS



Tapping Speeds depending on Materials

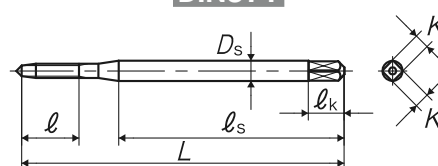
Medium carbon steels
中炭素鋼
5~10
(m/min)

High carbon steels
高炭素鋼
5~10
(m/min)

■The PO taps push the chips forward and discharge them in the direction of tapping. These taps cut a stable thread with few problems due to chips, making them ideal for through hole machining.

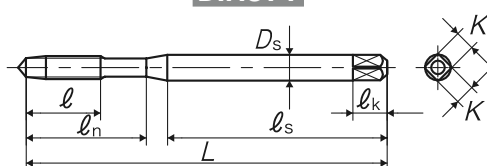
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DIN371



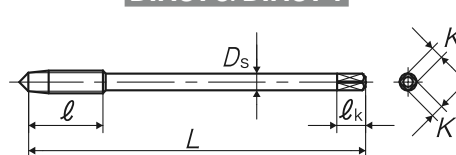
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DIN371



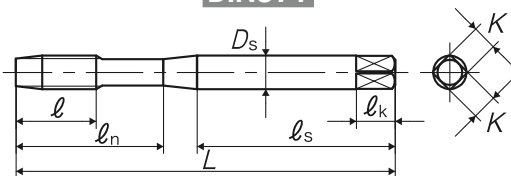
TYPE: 3

DIN376/DIN374



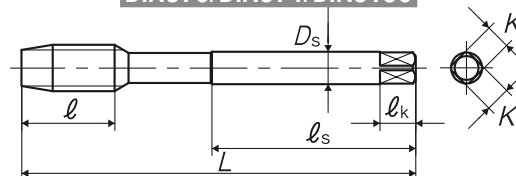
TYPE: 4

DIN371



TYPE: 5

DIN376/DIN374/DIN5156



Segment : 1F (G=1H)

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
For Metric Threads												
M2 × 0.4	ISO2	PD2.0EANE	5P	45	8	-	32	2.8	2.1	5	3	1
M2.2 × 0.45	ISO2	PD2.2FANE	5P	45	9	-	32	2.8	2.1	5	3	1
M2.3 × 0.4	ISO2	PD2.3EANE	5P	45	9	-	32	2.8	2.1	5	3	1
M2.5 × 0.45	ISO2	PD2.5FANE	5P	50	8	15	33	2.8	2.1	5	3	2
M2.6 × 0.45	ISO2	PD2.6FANE	5P	50	8	15	33	2.8	2.1	5	3	2
M3 × 0.5	ISO2	PD3.0GANE	5P	56	9	18	34	3.5	2.7	6	3	2
M3 × 0.5	ISO3	PD3.0GMNE	5P	56	9	18	34	3.5	2.7	6	3	2
M3.5 × 0.6	ISO2	PD3.5HANE	5P	56	11	20	32	4	3	6	3	2
M3.5 × 0.6	ISO3	PD3.5HMNE	5P	56	11	20	32	4	3	6	3	2
M4 × 0.7	ISO2	PD4.0IANE	5P	63	13	21	38	4.5	3.4	6	3	2
M4 × 0.7	ISO2	PG4.0IANE	5P	63	13	-	-	2.8	2.1	5	3	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

3

DIN

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M4 × 0.7	ISO3	PD4.0IMNEB	5P	63	13	21	38	4.5	3.4	6	3	2
M4 × 0.5	ISO2	PM4.0GANEB	5P	63	9	-	-	2.8	2.1	5	3	3
M5 × 0.8	ISO2	PD5.0KANEB	5P	70	14	25	39	6	4.9	8	3	2
M5 × 0.8	ISO2	PG5.0KANEB	5P	70	14	-	-	3.5	2.7	6	3	3
M5 × 0.8	ISO3	PD5.0KMNEB	5P	70	14	25	39	6	4.9	8	3	2
M5 × 0.5	ISO2	PM5.0GANEB	5P	70	11	-	-	3.5	2.7	6	3	3
M6 × 1	ISO2	PD6.0MANEB	5P	80	15	30	45	6	4.9	8	3	2
M6 × 1	ISO2	PG6.0MANEB	5P	80	15	-	-	4.5	3.4	6	3	3
M6 × 1	ISO3	PD6.0MMNEB	5P	80	15	30	45	6	4.9	8	3	2
M6 × 0.75	ISO2	PM6.0JANEB	5P	80	13	-	-	4.5	3.4	6	3	3
M6 × 0.5	ISO2	PM6.0GANEB	5P	80	13	-	-	4.5	3.4	6	3	3
M7 × 1	ISO2	PD7.0MANEB	5P	80	15	30	45	7	5.5	8	3	4
M7 × 0.75	ISO2	PM7.0JANEB	5P	80	13	-	41	5.5	4.3	7	3	5
M7 × 0.5	ISO2	PM7.0GANEB	5P	80	13	-	41	5.5	4.3	7	3	5
M8 × 1.25	ISO2	PD8.0NANEB	5P	90	19	35	47	8	6.2	9	3	4
M8 × 1.25	ISO2	PG8.0NANEB	5P	90	19	-	46	6	4.9	8	3	5
M8 × 1.25	ISO3	PD8.0NMNEB	5P	90	19	35	47	8	6.2	9	3	4
M8 × 1	ISO2	PM8.0MANEB	5P	90	19	-	46	6	4.9	8	3	5
M8 × 0.75	ISO2	PM8.0JANEB	5P	80	19	-	41	6	4.9	8	3	5
M8 × 0.5	ISO2	PM8.0GANEB	5P	80	19	-	41	6	4.9	8	3	5
M9 × 1.25	ISO2	PD9.0NANEB	5P	90	19	35	48	9	7	10	3	4
M9 × 1.25	ISO2	PG9.0NANEB	5P	90	19	-	46	7	5.5	8	3	5
M9 × 1	ISO2	PM9.0MANEB	5P	90	19	-	46	7	5.5	8	3	5
M10 × 1.5	ISO2	PD10.0OANEB	5P	100	23	39	52.5	10	8	11	3	4
M10 × 1.5	ISO2	PG10.0OANEB	5P	100	23	-	51	7	5.5	8	3	5
M10 × 1.5	ISO3	PD10.0OMNEB	5P	100	23	39	52.5	10	8	11	3	4
M10 × 1.25	ISO2	PM10.0NANEB	5P	100	23	-	51	7	5.5	8	3	5
M10 × 1	ISO2	PM10.0MANEB	5P	90	19	-	46	7	5.5	8	3	5
M10 × 0.75	ISO2	PM10.0JANEB	5P	90	19	-	46	7	5.5	8	3	5
M11 × 1.5	ISO2	PG11.0OANEB	5P	100	23	-	51	8	6.2	9	3	5
M12 × 1.75	ISO2	PG12.0PANEB	5P	110	26	-	56	9	7	10	3	5
M12 × 1.75	ISO3	PG12.0PMNEB	5P	110	26	-	56	9	7	10	3	5
M12 × 1.5	ISO2	PM12.0OANEB	5P	100	21	-	51	9	7	10	3	5
M12 × 1.25	ISO2	PM12.0NANEB	5P	100	21	-	51	9	7	10	3	5
M12 × 1	ISO2	PM12.0MANEB	5P	100	21	-	51	9	7	10	3	5
M14 × 2	ISO2	PG14.0QANEB	5P	110	26	-	56	11	9	12	3	5
M14 × 2	ISO3	PG14.0QMNEB	5P	110	26	-	56	11	9	12	3	5
M14 × 1.5	ISO2	PM14.0OANEB	5P	100	21	-	51	11	9	12	3	5
M14 × 1.25	ISO2	PM14.0NANEB	5P	100	21	-	51	11	9	12	3	5
M14 × 1	ISO2	PM14.0MANEB	5P	100	21	-	51	11	9	12	3	5
M16 × 2	ISO2	PG16.0QANEB	5P	110	26	-	56	12	9	12	3	5
M16 × 2	ISO3	PG16.0QMNEB	5P	110	26	-	56	12	9	12	3	5
M16 × 1.5	ISO2	PM16.0OANEB	5P	100	21	-	51	12	9	12	3	5
M16 × 1	ISO2	PM16.0MANEB	5P	100	21	-	51	12	9	12	3	5
M18 × 2.5	ISO2	PG18.0RANEB	5P	125	33	-	64	14	11	14	3	5
M18 × 2	ISO2	PM18.0QANEB	5P	125	33	-	64	14	11	14	3	5
M18 × 1.5	ISO2	PM18.0OANEB	5P	110	24	-	56	14	11	14	3	5
M18 × 1	ISO2	PM18.0MANEB	5P	110	24	-	56	14	11	14	3	5
M20 × 2.5	ISO2	PG20.0RANEB	5P	140	33	-	71	16	12	15	3	5
M20 × 2	ISO2	PM20.0QANEB	5P	140	33	-	71	16	12	15	3	5

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

③-44

③ Spiral Pointed Tap Series for through 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

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M20 × 1.5	ISO2	PM020OANEB	5P	125	24	-	64	16	12	15	3	5
M20 × 1	ISO2	PM020MANEB	5P	125	24	-	64	16	12	15	3	5
M22 × 2.5	ISO2	PG022RANEB	5P	140	33	-	71	18	14.5	17	3	5
M22 × 2	ISO2	PM022QANEB	5P	140	33	-	71	18	14.5	17	3	5
M22 × 1.5	ISO2	PM022OANEB	5P	125	24	-	64	18	14.5	17	3	5
M22 × 1	ISO2	PM022MANEB	5P	125	24	-	64	18	14.5	17	3	5
M24 × 3	ISO2	PG024SANEB	5P	160	37	-	82	18	14.5	17	3	5
M24 × 2	ISO2	PM024QANEB	5P	140	27	-	71	18	14.5	17	3	5
M24 × 1.5	ISO2	PM024OANEB	5P	140	27	-	71	18	14.5	17	3	5
M24 × 1	ISO2	PM024MANEB	5P	140	27	-	71	18	14.5	17	3	5
M25 × 1.5	ISO2	PM025OANEB	5P	140	27	-	71	18	14.5	17	3	5
M26 × 1.5	ISO2	PM026OANEB	5P	140	27	-	71	18	14.5	17	4	5
M27 × 3	ISO2	PG027SANEB	5P	160	37	-	82	20	16	19	4	5
M27 × 2	ISO2	PM027QANEB	5P	140	27	-	71	20	16	19	4	5
M27 × 1.5	ISO2	PM027OANEB	5P	140	27	-	71	20	16	19	4	5
M27 × 1	ISO2	PM027MANEB	5P	140	27	-	71	20	16	19	4	5
M28 × 2	ISO2	PM028QANEB	5P	140	27	-	71	20	16	19	4	5
M28 × 1.5	ISO2	PM028OANEB	5P	140	27	-	71	20	16	19	4	5
M28 × 1	ISO2	PM028MANEB	5P	140	27	-	71	20	16	19	4	5
M30 × 3.5	ISO2	PG030TANEB	5P	180	44	-	92	22	18	21	4	5
M30 × 2	ISO2	PM030QANEB	5P	150	27	-	77	22	18	21	4	5
M30 × 1.5	ISO2	PM030OANEB	5P	150	27	-	77	22	18	21	4	5
M30 × 1	ISO2	PM030MANEB	5P	150	27	-	77	22	18	21	4	5
M32 × 2	ISO2	PM032QANEB	5P	150	27	-	77	22	18	21	4	5
M32 × 1.5	ISO2	PM032OANEB	5P	150	27	-	77	22	18	21	4	5
M32 × 1	ISO2	PM032MANEB	5P	150	27	-	77	22	18	21	4	5
M33 × 3.5	ISO2	PG033TANEB	5P	180	46	-	92	25	20	23	4	5
M33 × 2	ISO2	PM033QANEB	5P	160	29	-	82	25	20	23	4	5
M33 × 1.5	ISO2	PM033OANEB	5P	160	29	-	82	25	20	23	4	5
M33 × 1	ISO2	PM033MANEB	5P	160	29	-	82	25	20	23	4	5
M36 × 4	ISO2	PG036UANEB	5P	200	52	-	102	28	22	25	4	5
M36 × 3	ISO2	PM036SANEB	5P	200	52	-	102	28	22	25	4	5
M36 × 2	ISO2	PM036QANEB	5P	170	29	-	87	28	22	25	4	5
M36 × 1.5	ISO2	PM036OANEB	5P	170	29	-	87	28	22	25	4	5
M36 × 1	ISO2	PM036MANEB	5P	170	29	-	87	28	22	25	4	5
M39 × 4	ISO2	PG039UANEB	5P	200	52	-	102	32	24	27	4	5
M39 × 2	ISO2	PM039QANEB	5P	170	29	-	87	32	24	27	4	5
M39 × 1.5	ISO2	PM039OANEB	5P	170	29	-	87	32	24	27	4	5
M39 × 1	ISO2	PM039MANEB	5P	170	29	-	87	32	24	27	4	5
M42 × 4.5	ISO2	PG042VANEB	5P	200	59	-	102	32	24	27	4	5
M42 × 2	ISO2	PM042QANEB	5P	170	29	-	87	32	24	27	4	5
M42 × 1.5	ISO2	PM042OANEB	5P	170	29	-	87	32	24	27	4	5
M42 × 1	ISO2	PM042MANEB	5P	170	29	-	87	32	24	27	4	5
M45 × 4.5	ISO2	PG045VANEB	5P	220	59	-	112	36	29	32	4	5
M45 × 3	ISO2	PM045SANEB	5P	200	49	-	102	36	29	32	4	5
M45 × 2	ISO2	PM045QANEB	5P	180	31	-	92	36	29	32	4	5
M45 × 1.5	ISO2	PM045OANEB	5P	180	31	-	92	36	29	32	4	5
M45 × 1	ISO2	PM045MANEB	5P	180	31	-	92	36	29	32	4	5
M48 × 5	ISO2	PG048WANEB	5P	250	65	-	128	36	29	32	4	5
M48 × 3	ISO2	PM048SANEB	5P	225	49	-	115	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

③-45

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

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M48 × 2	ISO2	PM048QANE	5P	190	31	-	97	36	29	32	4	5
M48 × 1.5	ISO2	PM048OANE	5P	190	31	-	97	36	29	32	4	5
M48 × 1	ISO2	PM048MANE	5P	190	31	-	97	36	29	32	4	5
For Unified Threads												
No.4-40UNC	2B	PDUN4HXNE	5P	56	9	18	34	3.5	2.7	6	3	2
No.4-48UNF	2B	PDUN4FXNE	5P	56	9	18	34	3.5	2.7	6	3	2
No.5-40UNC	2B	PDUN5HXNE	5P	56	11	18	34	3.5	2.7	6	3	2
No.5-44UNF	2B	PDUN5GXNE	5P	56	11	18	34	3.5	2.7	6	3	2
No.6-32UNC	2B	PDUN6JXNE	5P	56	11	19	32	4	3	6	3	2
No.6-40UNF	2B	PDUN6HXNE	5P	56	11	19	32	4	3	6	3	2
No.8-32UNC	2B	PDUN8JXNE	5P	63	13	21	38	4.5	3.4	6	3	2
No.8-36UNF	2B	PDUN8IXNE	5P	63	13	21	38	4.5	3.4	6	3	2
No.10-24UNC	2B	PDUNAMXNE	5P	70	14	24	39	6	4.9	8	3	2
No.10-32UNF	2B	PDUNAJXNE	5P	70	14	24	39	6	4.9	8	3	2
No.12-24UNC	2B	PDUNCMXNE	5P	80	15	28	45	6	4.9	8	3	2
No.12-28UNF	2B	PDUNCKXNE	5P	80	15	28	45	6	4.9	8	3	2
1/4-20UNC	2B	PDU04NXNE	5P	80	15	30	42	7	5.5	8	3	2
1/4-28UNF	2B	PDU04KXNE	5P	80	15	30	42	7	5.5	8	3	2
5/16-18UNC	2B	PDU05OXNE	5P	90	19	35	47	8	6.2	9	3	4
5/16-24UNF	2B	PMU05MXNE	5P	90	19	-	46	6	4.9	8	3	5
3/8-16UNC	2B	PDU06PXNE	5P	100	23	39	54.5	9	7	10	3	4
3/8-24UNF	2B	PMU06MXNE	5P	100	23	-	51	7	5.5	8	3	5
7/16-14UNC	2B	PGU07QXNE	5P	100	23	-	51	8	6.2	9	3	5
7/16-20UNF	2B	PMU07NXNE	5P	100	23	-	51	8	6.2	9	3	5
1/2-13UNC	2B	PGU08RXNE	5P	110	26	-	56	9	7	10	3	5
1/2-20UNF	2B	PMU08NXNE	5P	100	21	-	51	9	7	10	3	5
9/16-12UNC	2B	PGU09SXNE	5P	110	26	-	56	11	9	12	3	5
9/16-18UNF	2B	PMU09OXNE	5P	100	21	-	51	11	9	12	3	5
5/8-11UNC	2B	PGU10UXNE	5P	110	26	-	56	12	9	12	3	5
5/8-18UNF	2B	PMU10OXNE	5P	100	21	-	51	12	9	12	3	5
3/4-10UNC	2B	PGU12VXNE	5P	125	33	-	64	14	11	14	3	5
3/4-16UNF	2B	PMU12PXNE	5P	110	24	-	56	14	11	14	3	5
7/8-9UNC	2B	PGU14WXNE	5P	140	33	-	71	18	14.5	17	3	5
7/8-14UNF	2B	PMU14QXNE	5P	125	24	-	64	18	14.5	17	3	5
1 -8UNC	2B	PGU16XXNE	5P	160	37	-	82	18	14.5	17	3	5
1 -12UNF	2B	PMU16SXNE	5P	140	27	-	71	18	14.5	17	3	5
1 1/8-7UNC	2B	PGU18YXNE	5P	180	44	-	92	22	18	21	4	5
1 1/8-12UNF	2B	PMU18SXNE	5P	150	27	-	77	22	18	21	4	5
1 1/4-7UNC	2B	PGU20YXNE	5P	180	49	-	92	22	18	21	4	5
1 1/4-12UNF	2B	PMU20SXNE	5P	150	27	-	77	22	18	21	4	5
1 3/8-6UNC	2B	PGU22ZXNE	5P	200	55	-	102	28	22	25	4	5
1 3/8-12UNF	2B	PMU22SXNE	5P	170	29	-	87	28	20	23	4	5
1 1/2-6UNC	2B	PGU24ZXNE	5P	200	59	-	102	32	24	27	4	5
1 1/2-12UNF	2B	PMU24SXNE	5P	170	29	-	87	32	24	27	4	5
1 3/4-5UNC	2B	PGU280XNE	5P	220	65	-	112	36	29	32	4	5
1 3/4-12UN	2B	PMU28SXNE	5P	180	31	-	92	36	29	32	4	5
For G Threads												
G 1/16-28	-	PVG0010NE	5P	90	19	-	46	6	4.9	8	3	5
G 1/8-28	-	PVG0020NE	5P	90	19	-	46	7	5.5	8	3	5
G 1/4-19	-	PVG0040NE	5P	100	21	-	51	11	9	12	3	5

3

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

③-46

③ Spiral Pointed Tap Series for through 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

PO Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
G 3/8-19	-	PVG0060NEB	5P	100	21	-	51	12	9	12	3	5
G 1/2-14	-	PVG0080NEB	5P	125	24	-	64	16	12	15	3	5
G 5/8-14	-	PVG0100NEB	5P	125	24	-	64	18	14.5	17	3	5
G 3/4-14	-	PVG0120NEB	5P	140	27	-	71	20	16	19	4	5
G 7/8-14	-	PVG0140NEB	5P	150	27	-	77	22	18	21	4	5
G 1 -11	-	PVG0160NEB	5P	160	29	-	82	25	20	23	4	5
G 1 1/8-11	-	PVG0180NEB	5P	170	29	-	87	28	22	25	4	5
G 1 1/4-11	-	PVG0200NEB	5P	170	29	-	87	32	24	27	4	5
G 1 1/2-11	-	PVG0240NEB	5P	190	31	-	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

③-47

Think threads with
YAMAWA

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

Spiral Pointed Tap Series for through hole

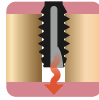
S
JIS

+PO

Plus Series Spiral Pointed Taps

Specification

HSS



Tapping Speeds depending on Materials

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

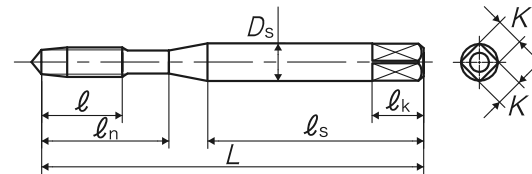
High carbon steels
高炭素鋼
10~15
(m/min)

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



■ The +PO is a spiral pointed tap for through hole tapping and is suitable for synchronous feed processing in middle to high tapping speed.

TYPE: 1



Segment : 1E

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	P2	PNPQ3.0G	5P	46	9	14	26	4	3.2	6	3	1	¥ 1,360
M3.5 × 0.6	P2	PNPQ3.5H	5P	52	11	16	29	5	4	7	3	1	¥ 1,440
M4 × 0.7	P2	PNPQ4.0I	5P	52	11	17	29	5	4	7	3	1	¥ 1,360
M5 × 0.8	P2	PNPQ5.0K	5P	60	13	22	33	5.5	4.5	7	3	1	¥ 1,370
M6 × 1	P2	PNPQ6.0M	5P	62	15	26	33	6	4.5	7	3	1	¥ 1,510

3

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

③-48

③ Spiral Pointed Tap Series for through 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

③-49



IPO

Spiral Pointed Taps for General Purpose



Specification



Tapping Speeds depending on Materials



Blister Pack



Product Features

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



Tapping for through holes

How to use IPO

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



When hand tapping, always use tap wrench



Machine tapping with drilling machine

Table for bored and drilled hole sizes

unit: mm

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

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

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

[Related products]

Shank adjuster

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

*For details of shank adjuster, refer to ⑦-83



Think threads with
YAMAWA

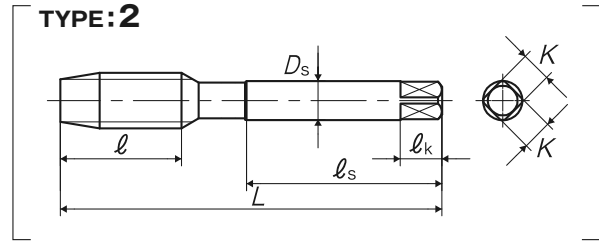
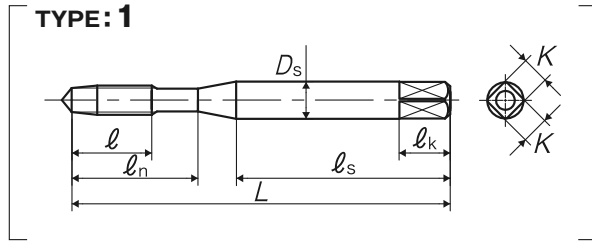
Obtainable from
video site shown in right



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

3

JIS



Blister Pack

Segment : 1E

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	PI73.0GBP	5P	46	9	14	26	4	3.2	6	3	1	¥ 910
M4 × 0.7	PI74.0IBP	5P	52	11	17	29	5	4	7	3	1	¥ 950
M5 × 0.8	PI75.0KBP	5P	60	13	22	33	5.5	4.5	7	3	1	¥ 960
M6 × 1	PI76.0MBP	5P	62	15	26	33	6	4.5	7	3	1	¥ 1,010
M8 × 1.25	PI78.0NBP	5P	70	19	-	36	6.2	5	8	3	2	¥ 1,550
M10 × 1.5	PI7010OBP	5P	75	23	-	38	7	5.5	8	3	2	¥ 1,940

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

③ Spiral Pointed Tap Series for through 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

IPO

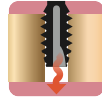
Spiral Pointed Taps for General Purpose



Specification

HSS

OX
Oxide

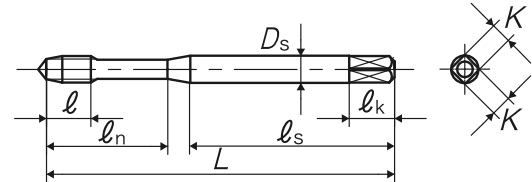


■ Suitable for low speed tapping of steels. For manual use and drilling machine use.

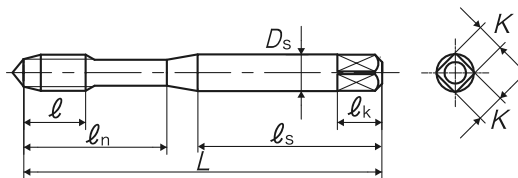
Tapping Speed depending on Materials

Low carbon steels
低碳素鋼
~5
(m/min)

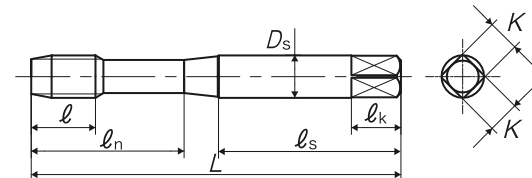
TYPE: 1



TYPE: 2



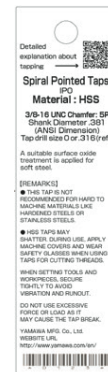
TYPE: 3



Segment : 1E

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	-	VAUN6JXHEX	4.5P	2	0.374	0.669	1.201	0.141	0.11	0.187	2	1
No.8-32UNC	-	VAUN8JXHEX	4.5P	2.125	0.374	0.866	1.339	0.168	0.131	0.25	2	1
No.10-24UNC	-	VAUNAMXHEX	4.5P	2.375	0.512	0.866	1.339	0.194	0.152	0.25	2	1
1/4-20UNC	-	VAU04NXHEX	4.5P	2.5	0.591	1.024	1.22	0.255	0.191	0.312	2	2
5/16-18UNC	-	VAU05OXHEX	4.5P	2.718	0.669	1.004	1.378	0.318	0.238	0.375	3	3
3/8-16UNC	-	VAU06PXHEX	4.5P	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	-	VAUN6JXHEXR	4.5P	2	0.374	0.669	1.201	0.141	0.11	0.187	2	1
No.8-32UNC	-	VAUN8JXHEXR	4.5P	2.125	0.374	0.866	1.339	0.168	0.131	0.25	2	1
No.10-24UNC	-	VAUNAMXHEXR	4.5P	2.375	0.512	0.866	1.339	0.194	0.152	0.25	2	1
1/4-20UNC	-	VAU04NXHEXR	4.5P	2.5	0.591	1.024	1.22	0.255	0.191	0.312	2	2
5/16-18UNC	-	VAU05OXHEXR	4.5P	2.718	0.669	1.004	1.378	0.318	0.238	0.375	3	3
3/8-16UNC	-	VAU06PXHEXR	4.5P	2.937	0.748	1.059	1.496	0.381	0.286	0.437	3	3

Blister Package



ANSI

③-51

Think threads with
YAMAWA

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

Spiral Pointed Tap Series for through 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

3

JIS

PO OX

Spiral Pointed Taps, Oxidized



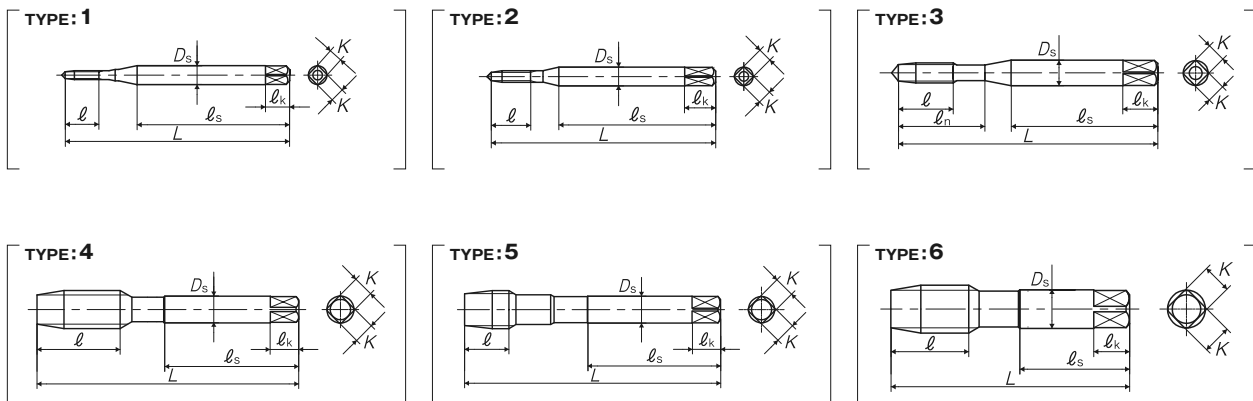
Specification



■The +PO is a spiral pointed tap for through hole tapping and is suitable for synchronous feed processing in middle to high thread processing of soft steel materials whose chips easily weld to the taps thread such as low carbon steels.

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



Segment : 1E

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													
M1.4 × 0.3	P1	POP1.4CX	5P	36	5.4	-	24	3	2.5	5	2	1	¥ 4,070 ※
M1.4 × 0.3	P2	POQ1.4CX	5P	36	5.4	-	24	3	2.5	5	2	1	¥ 4,070 ※
M1.6 × 0.35	P2	POQ1.6DX	5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,890 ※
M1.7 × 0.35	P2	POQ1.7DX	5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,890 ※
M2 × 0.4	P2	POQ2.0EX	5P	42	7.2	12	27	3	2.5	5	3	3	¥ 3,110
M2 × 0.4	P3	POR2.0EX	5P	42	7.2	12	27	3	2.5	5	3	3	¥ 3,110 ※
M2.3 × 0.4	P2	POQ2.3EX	5P	42	7.2	12	27	3	2.5	5	3	3	¥ 2,840 ※
M2.5 × 0.45	P2	POQ2.5FX	5P	46	8.1	14	29	3	2.5	5	3	3	¥ 2,380 ※
M2.6 × 0.45	P2	POQ2.6FX	5P	46	8.1	14	29	3	2.5	5	3	3	¥ 2,380 ※
M2.6 × 0.45	P3	POR2.6FX	5P	46	8.1	14	29	3	2.5	5	3	3	¥ 2,380 ※
M3 × 0.5	P2	POQ3.0GX	5P	46	9	14	26	4	3.2	6	3	3	¥ 1,670
M3 × 0.5	P3	POR3.0GX	5P	46	9	14	26	4	3.2	6	3	3	¥ 1,670 ※
3M0.6	P2	POQ3.0HX	5P	46	9	14	26	4	3.2	6	3	3	¥ 1,670 ※
M3.5 × 0.6	P2	POQ3.5HX	5P	52	11	16	29	5	4	7	3	3	¥ 1,670 ※
M4 × 0.7	P2	POQ4.0IX	5P	52	11	17	29	5	4	7	3	3	¥ 1,670
M4 × 0.7	P3	POR4.0IX	5P	52	11	17	29	5	4	7	3	3	¥ 1,670 ※
4M0.75	P2	POQ4.0JX	5P	52	11	17	29	5	4	7	3	3	¥ 1,670 ※
M5 × 0.8	P2	POQ5.0KX	5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,680
M5 × 0.8	P3	POR5.0KX	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

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

③-52

③ Spiral Pointed Tap Series for through 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

PO OX Spiral Pointed 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
① 5M0.9	P2	POQ5.0LX	5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,680 ※
M6 × 1	P2	POQ6.0MX	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,850
M6 × 1	P3	POR6.0MX	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,850 ※
M6 × 1	P4	POS6.0MX	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,850 ※
② M7 × 1	P2	POQ7.0MX	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,210 ※
M8 × 1.25	P3	POR8.0NX	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,550
M8 × 1.25	P4	POS8.0NX	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,550 ※
M8 × 1	P3	POR8.0MX	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,880 ※
M8 × 0.5	P2	POQ8.0GX	5P	70	10	-	36	6.2	5	8	3	5	¥ 4,070 ※
M10 × 1.5	P3	POR010OX	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,230
M10 × 1.5	P4	POS010OX	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,230 ※
M10 × 1.25	P3	POR010NX	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,230 ※
M10 × 1	P3	POR010MX	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,830 ※
M10 × 1	P4	POS010MX	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,830 ※
M12 × 1.75	P4	POS012PX	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,580
M12 × 1.5	P3	POR012OX	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,580 ※
M12 × 1.25	P4	POS012NX	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,580 ※
M14 × 2	P4	POS014QX	5P	88	26	-	45	10.5	8	11	3	4	¥ 6,240 ※
M14 × 1.5	P3	POR014OX	5P	88	26	-	45	10.5	8	11	3	4	¥ 6,240 ※
M14 × 1.25	P3	POR014NX	5P	88	26	-	45	10.5	8	11	3	4	¥ 7,240 ※
M14 × 1	P3	POR014MX	5P	88	26	-	45	10.5	8	11	3	4	¥ 7,240 ※
M16 × 2	P4	POS016QX	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,340
M16 × 1.5	P3	POR016OX	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,340 ※
M18 × 2.5	P4	POS018RX	5P	100	33	-	51	14	11	14	3	4	¥ 11,200 ※
M18 × 2	P4	POS018QX	5P	100	33	-	51	14	11	14	3	4	¥ 11,200 ※
M18 × 1.5	P4	POS018OX	5P	100	33	-	51	14	11	14	3	4	¥ 11,200 ※
M20 × 2.5	P4	POS020RX	5P	105	33	-	50	15	12	15	3	6	¥ 15,300
M20 × 1.5	P4	POS020OX	5P	105	33	-	50	15	12	15	3	6	¥ 15,300 ※
M22 × 2.5	P4	POS022RX	5P	115	33	-	55	17	13	16	3	6	¥ 19,500 ※
M22 × 1.5	P4	POS022OX	5P	115	33	-	55	17	13	16	3	6	¥ 19,500 ※
M24 × 3	P4	POS024SX	5P	120	39	-	55	19	15	18	3	6	¥ 24,300 ※
M25 × 1.5	P4	POS025OX	5P	125	39	-	58	19	15	18	3	6	¥ 31,400 ※
M26 × 3	P4	POS026SX	5P	130	39	-	60	20	15	18	4	6	¥ 33,800 ※
M27 × 3	P4	POS027SX	5P	130	39	-	60	20	15	18	4	6	¥ 33,800 ※
M30 × 3.5	P5	POT030TX	5P	135	46	-	62	23	17	20	4	6	¥ 43,000 ※
M30 × 3	P4	POS030SX	5P	135	46	-	62	23	17	20	4	6	¥ 43,000 ※
M32 × 2	P4	POMS032QX	5P	145	46	-	67	24	19	22	4	6	¥ 50,000 ※
M32 × 1.5	P4	POMS032OX	5P	145	46	-	67	24	19	22	4	6	¥ 50,000 ※
M33 × 3.5	P5	POMT033TX	5P	145	46	-	67	25	19	22	4	6	¥ 50,000 ※
M33 × 3	P4	POMS033SX	5P	145	46	-	67	25	19	22	4	6	¥ 50,000 ※
M36 × 4	P5	POMT036UX	5P	155	52	-	71	28	21	24	4	6	¥ 57,900
M36 × 3	P4	POMS036SX	5P	155	52	-	71	28	21	24	4	6	¥ 57,900 ※
M42 × 4.5	P5	POMT042VX	5P	175	59	-	81	32	26	30	4	6	¥ 80,800 ※
For Unified Threads													
No.0-80UNF	P1	POPUN0BX	5P	36	6.3	-	24	3	2.5	5	2	2	¥ 4,610 ※
No.2-56UNC	P1	POPUN2EX	5P	42	8.1	12	27	3	2.5	5	3	3	¥ 3,260 ※
No.4-40UNC	P2	POQUN4HX	5P	46	9	14	25	4	3.2	6	3	3	¥ 2,100 ※
No.5-40UNC	P2	POQUN5HX	5P	52	11	16	28	5	4	7	3	3	¥ 1,960 ※
No.6-32UNC	P2	POQUN6JX	5P	52	11	17	27	5	4	7	3	3	¥ 1,960 ※
No.6-40UNF	P2	POQUN6HX	5P	52	11	17	27	5	4	7	3	3	¥ 1,960 ※
No.8-32UNC	P2	POQUN8JX	5P	60	13	22	31	5.5	4.5	7	3	3	¥ 1,970 ※

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

PO OX Spiral Pointed 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
No.10-24UNC	P2	POQUNAMX	5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,970 ※
No.10-32UNF	P2	POQUNAJX	5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,970 ※
No.12-24UNC	P2	POQUNCMX	5P	62	15	26	32	6	4.5	7	3	3	¥ 2,120 ※
No.12-28UNF	P2	POQUNCKX	5P	62	15	26	32	6	4.5	7	3	3	¥ 2,120 ※
1/4-20UNC	P2	POQU04NX	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,120 ※
1/4-28UNF	P2	POQU04KX	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,120 ※
5/16-18UNC	P3	PORU05OX	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,930 ※
5/16-24UNF	P2	POQU05MX	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,930 ※
3/8-16UNC	P3	PORU06PX	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,750 ※
3/8-24UNF	P2	POQU06MX	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,750 ※
7/16-14UNC	P3	PORU07QX	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 5,270 ※
7/16-20UNF	P3	PORU07NX	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 5,270 ※
1/2-13UNC	P3	PORU08RX	5P	88	26	-	45	10.5	8	11	3	4	¥ 5,600 ※
1/2-20UNF	P3	PORU08NX	5P	88	26	-	45	10.5	8	11	3	4	¥ 5,600 ※
9/16-18UNF	P3	PORU09OX	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,340 ※
5/8-11UNC	P3	PORU10UX	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,340 ※
5/8-18UNF	P3	PORU10OX	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,340 ※
3/4-10UNC	P4	POSU12VX	5P	105	33	-	50	15	12	15	3	6	¥ 15,300 ※
3/4-16UNF	P3	PORU12PX	5P	105	33	-	50	15	12	15	3	6	¥ 15,300 ※
7/8-9UNC	P4	POSU14WX	5P	115	33	-	55	17	13	16	3	6	¥ 21,500 ※
7/8-14UNF	P3	PORU14QX	5P	115	33	-	55	17	13	16	3	6	¥ 21,500 ※
1 -8UNC	P4	POSU16XX	5P	125	39	-	58	19	15	18	3	6	¥ 31,400 ※
1 3/8-12UNF	P4	POMSU22SX	5P	155	52	-	71	28	21	24	4	6	¥ 57,900 ※
1 1/2-12UNF	P4	POMSU24SX	5P	165	52	-	76	30	23	26	4	6	¥ 82,800 ※
For Whitworth Threads													
1/8W40	P2	POQW02HX	5P	52	11	16	28	5	4	7	3	3	¥ 2,440 ※
5/32W32	P2	POQW2HJX	5P	52	11	17	29	5	4	7	3	3	¥ 1,960 ※
3/16W24	P2	POQW03MX	5P	60	13	21	32	5.5	4.5	7	3	3	¥ 1,970 ※
1/4W20	P3	PORW04NX	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,120 ※
5/16W18	P3	PORW05OX	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,930 ※
3/8W16	P3	PORW06PX	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,750 ※
7/16W14	P3	PORW07QX	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 5,270 ※
1/2W12	P3	PORW08SX	5P	88	26	-	45	10.5	8	11	3	4	¥ 5,600 ※
5/8W11	P3	PORW10UX	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,340 ※
3/4W10	P4	POSW12VX	5P	105	33	-	50	15	12	15	3	6	¥ 15,300 ※
7/8W9	P4	POSW14WX	5P	115	33	-	55	17	13	16	3	6	¥ 21,500 ※
1 W8	P4	POSW16XX	5P	125	39	-	58	19	15	18	3	6	¥ 31,400 ※
1 1/4W7	P4	POMSW20YX	5P	145	46	-	67	24	19	22	4	6	¥ 50,000 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

3

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

③-54

③ Spiral Pointed Tap Series for through 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

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

PO OX

Spiral Pointed Taps, Oxidized



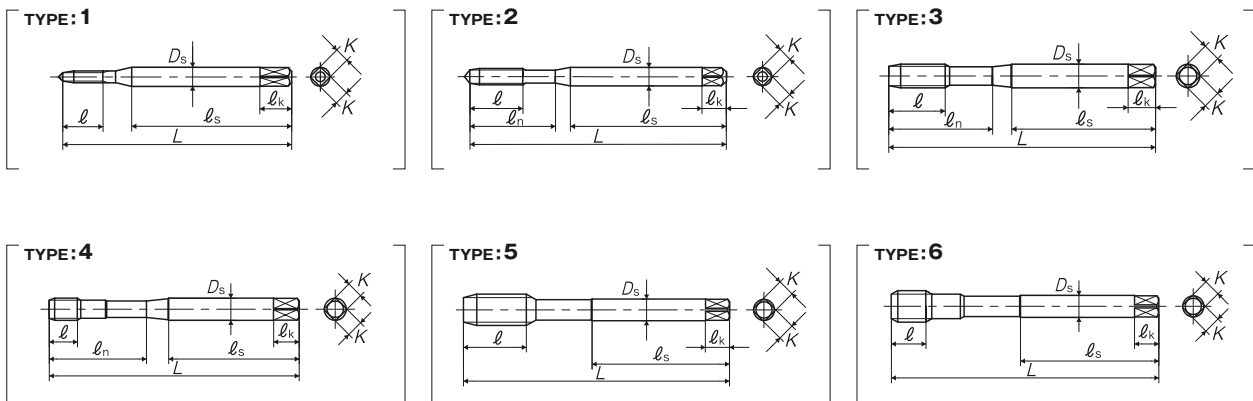
Specification



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 +PO is a spiral pointed tap for through hole tapping and is suitable for synchronous feed processing in middle to high thread processing of soft steel materials whose chips easily weld to the taps thread such as low carbon steels.



Segment : 1E

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	PS2.0E3NEX	5P	1.772	0.314	-	1.161	0.141	0.11	0.187	3	1
M2.2 × 0.45	D3	PS2.2F3NEX	5P	1.772	0.314	-	1.161	0.141	0.11	0.187	3	1
M2.5 × 0.45	D3	PS2.5F3NEX	5P	2.205	0.354	0.693	1.28	0.141	0.11	0.187	3	2
M2.6 × 0.45	D3	PS2.6F3NEX	5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	3	2
M3 × 0.5	D3	PS3.0G3NEX	5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	3	2
M3.5 × 0.6	D4	PS3.5H4NEX	5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
M4 × 0.7	D4	PS4.0I4NEX	5P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	3	2
M5 × 0.8	D4	PS5.0K4NEX	5P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	3	2
M6 × 1	D5	PS6.0M5NEX	5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
M7 × 1	D5	PS7.0M5NEX	5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	3
M7 × 0.75	D4	PS7.0J4NEX	5P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	3	3
M7 × 0.5	D4	PS7.0G4NEX	5P	3.543	0.394	1.339	1.831	0.318	0.238	0.375	3	4
M8 × 1.25	D5	PS8.0N5NEX	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 1	D5	PS8.0M5NEX	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 0.75	D4	PS8.0J4NEX	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M8 × 0.5	D4	PS8.0G4NEX	5P	3.543	0.394	1.378	1.831	0.318	0.238	0.375	3	4
M9 × 1.25	D5	PS9.0N5NEX	5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
M9 × 1	D5	PS9.0M5NEX	5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
M10 × 1.5	D6	PS10.0O6NEX	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 1.25	D5	PS10.0N5NEX	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3

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③-55

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

3

ANSI

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	PS010M5NEX	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 0.75	D4	PS010J4NEX	5P	3.937	0.512	1.535	2.126	0.381	0.286	0.437	3	4
M11 × 1.5	D6	PS011O6NEX	5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
M12 × 1.75	D6	PS012P6NEX	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M12 × 1.5	D6	PS012O6NEX	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M12 × 1.25	D6	PS012N6NEX	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M12 × 1	D5	PS012M5NEX	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
M14 × 2	D7	PS014Q7NEX	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M14 × 1.5	D6	PS014O6NEX	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M14 × 1.25	D6	PS014N6NEX	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M14 × 1	D5	PS014M5NEX	5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
M16 × 2	D7	PS016Q7NEX	5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
M16 × 1.5	D6	PS016O6NEX	5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
M16 × 1	D5	PS016M5NEX	5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
M18 × 2.5	D7	PS018R7NEX	5P	4.921	1.299	-	2.52	0.542	0.406	0.625	3	5
M18 × 2	D7	PS018Q7NEX	5P	4.921	1.299	-	2.52	0.542	0.406	0.625	3	5
M18 × 1.5	D6	PS018O6NEX	5P	4.921	0.945	-	2.52	0.542	0.406	0.625	3	6
M18 × 1	D5	PS018M5NEX	5P	4.921	0.945	-	2.52	0.542	0.406	0.625	3	6
M20 × 2.5	D7	PS020R7NEX	5P	5.512	1.299	-	2.795	0.652	0.489	0.687	3	5
M20 × 2	D7	PS020Q7NEX	5P	5.512	1.299	-	2.795	0.652	0.489	0.687	3	5
M20 × 1.5	D6	PS020O6NEX	5P	5.512	0.945	-	2.795	0.652	0.489	0.687	3	6
M20 × 1	D5	PS020M5NEX	5P	5.512	0.945	-	2.795	0.652	0.489	0.687	3	6
M22 × 2.5	D7	PS022R7NEX	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
M22 × 2	D7	PS022Q7NEX	5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
M22 × 1.5	D6	PS022O6NEX	5P	5.512	0.945	-	2.795	0.697	0.523	0.75	3	6
M22 × 1	D5	PS022M5NEX	5P	5.512	0.945	-	2.795	0.697	0.523	0.75	3	6
M24 × 3	D8	PS024S8NEX	5P	6.299	1.457	-	3.228	0.76	0.57	0.75	3	5
M24 × 2	D7	PS024Q7NEX	5P	6.299	1.063	-	3.228	0.76	0.57	0.75	3	6
M24 × 1.5	D6	PS024O6NEX	5P	6.299	1.063	-	3.228	0.76	0.57	0.75	3	6
M24 × 1	D5	PS024M5NEX	5P	6.299	1.063	-	3.228	0.76	0.57	0.75	3	6
M25 × 1.5	D6	PS025O6NEX	5P	6.299	1.063	-	3.228	0.8	0.6	0.812	3	6
M26 × 1.5	D6	PS026O6NEX	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M27 × 3	D8	PS027S8NEX	5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
M27 × 2	D7	PS027Q7NEX	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M27 × 1.5	D6	PS027O6NEX	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M27 × 1	D5	PS027M5NEX	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M28 × 2	D7	PS028Q7NEX	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M28 × 1.5	D6	PS028O6NEX	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M28 × 1	D5	PS028M5NEX	5P	7.087	1.063	-	3.622	0.896	0.672	0.875	4	6
M30 × 3.5	D9	PS030T9NEX	5P	7.087	1.732	-	3.622	1.021	0.766	1	4	5
M30 × 2	D7	PS030Q7NEX	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M30 × 1.5	D6	PS030O6NEX	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M30 × 1	D5	PS030M5NEX	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M32 × 2	D7	PS032Q7NEX	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M32 × 1.5	D6	PS032O6NEX	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M32 × 1	D5	PS032M5NEX	5P	7.087	1.063	-	3.622	1.021	0.766	1	4	5
M33 × 3.5	D9	PS033T9NEX	5P	7.087	1.732	-	3.622	1.108	0.831	1.062	4	5
M33 × 2	D7	PS033Q7NEX	5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	6
M33 × 1.5	D6	PS033O6NEX	5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	6
M33 × 1	D5	PS033M5NEX	5P	7.087	1.142	-	3.622	1.108	0.831	1.062	4	6

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

③-56

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

③ Spiral Pointed Tap Series for through 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

PO OX Spiral Pointed 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	PS036U9NEX	5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	5
M36 × 3	D8	PS036S8NEX	5P	7.874	2.047	-	4.016	1.233	0.925	1.125	4	5
M36 × 2	D7	PS036Q7NEX	5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	6
M36 × 1.5	D6	PS036O6NEX	5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	6
M36 × 1	D5	PS036M5NEX	5P	7.874	1.142	-	4.016	1.233	0.925	1.125	4	6
M39 × 4	D9	PS039U9NEX	5P	7.874	2.047	-	4.016	1.305	0.979	1.125	4	5
M39 × 3	D8	PS039S8NEX	5P	7.874	2.047	-	4.016	1.305	0.979	1.125	4	5
M39 × 2	D7	PS039Q7NEX	5P	7.874	1.142	-	4.016	1.305	0.979	1.125	4	6
M39 × 1.5	D6	PS039O6NEX	5P	7.874	1.142	-	4.016	1.305	0.979	1.125	4	6
M39 × 1	D5	PS039M5NEX	5P	7.874	1.142	-	4.016	1.305	0.979	1.125	4	6
M42 × 4.5	D10	PS042VONEX	5P	7.874	2.047	-	4.016	1.43	1.072	1.25	4	5
M42 × 2	D7	PS042Q7NEX	5P	7.874	1.142	-	4.016	1.43	1.072	1.25	4	6
M42 × 1.5	D6	PS042O6NEX	5P	7.874	1.142	-	4.016	1.43	1.072	1.25	4	6
M42 × 1	D5	PS042M5NEX	5P	7.874	1.142	-	4.016	1.43	1.072	1.25	4	6
M45 × 4.5	D10	PS045VONEX	5P	8.661	2.323	-	4.409	1.519	1.139	1.25	4	5
M45 × 3	D8	PS045S8NEX	5P	8.661	2.323	-	4.409	1.519	1.139	1.25	4	5
M45 × 2	D7	PS045Q7NEX	5P	8.661	1.22	-	4.409	1.519	1.139	1.25	4	6
M45 × 1.5	D6	PS045O6NEX	5P	8.661	1.22	-	4.409	1.519	1.139	1.25	4	6
M45 × 1	D5	PS045M5NEX	5P	8.661	1.22	-	4.409	1.519	1.139	1.25	4	6
M48 × 5	D11	PS048W-NEX	5P	9.843	2.559	-	5.039	1.644	1.233	1.375	4	5
M48 × 3	D9	PS048S9NEX	5P	9.843	2.559	-	5.039	1.644	1.233	1.375	4	5
M48 × 2	D7	PS048Q7NEX	5P	9.843	1.22	-	5.039	1.644	1.233	1.375	4	6
M48 × 1.5	D7	PS048O7NEX	5P	9.843	1.22	-	5.039	1.644	1.233	1.375	4	6
M48 × 1	D6	PS048M6NEX	5P	9.843	1.22	-	5.039	1.644	1.233	1.375	4	6
For Unified Threads												
No.0-80UNF	GH1	PSUN0B1NEX	5P	1.772	0.236	-	1.161	0.141	0.11	0.187	2	1
No.0-80UNF	GH2	PSUN0B2NEX	5P	1.772	0.236	-	1.161	0.141	0.11	0.187	2	1
No.1-64UNC	GH1	PSUN1D1NEX	5P	1.772	0.276	-	1.161	0.141	0.11	0.187	2	1
No.1-64UNC	GH2	PSUN1D2NEX	5P	1.772	0.276	-	1.161	0.141	0.11	0.187	2	1
No.1-72UNF	GH1	PSUN1C1NEX	5P	1.772	0.276	-	1.161	0.141	0.11	0.187	2	1
No.1-72UNF	GH2	PSUN1C2NEX	5P	1.772	0.276	-	1.161	0.141	0.11	0.187	2	1
No.2-56UNC	GH1	PSUN2E1NEX	5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.2-56UNC	GH2	PSUN2E2NEX	5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.2-64UNF	GH1	PSUN2D1NEX	5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.2-64UNF	GH2	PSUN2D2NEX	5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
No.3-48UNC	GH1	PSUN3F1NEX	5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.3-48UNC	GH2	PSUN3F2NEX	5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.3-56UNF	GH1	PSUN3E1NEX	5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.3-56UNF	GH2	PSUN3E2NEX	5P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	2	2
No.4-40UNC	GH2	PSUN4H2NEX	5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.4-40UNC	GH3	PSUN4H3NEX	5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.4-48UNF	GH1	PSUN4F1NEX	5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.4-48UNF	GH2	PSUN4F2NEX	5P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	2	2
No.5-40UNC	GH2	PSUN5H2NEX	5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-40UNC	GH3	PSUN5H3NEX	5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-44UNF	GH1	PSUN5G1NEX	5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-44UNF	GH2	PSUN5G2NEX	5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.5-44UNF	GH3	PSUN5G3NEX	5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	2	2
No.6-32UNC	GH2	PSUN6J2NEX	5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	2	2
No.6-32UNC	GH3	PSUN6J3NEX	5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	2	2

ANSI

Think threads with
YAMAWA

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

PO OX Spiral Pointed Taps, Oxidized

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
No.6-40UNF	GH2	PSUN6H2NEX	5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	2	2
No.6-40UNF	GH3	PSUN6H3NEX	5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	2	2
No.8-32UNC	GH2	PSUN8J2NEX	5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	2	2
No.8-32UNC	GH3	PSUN8J3NEX	5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	2	2
No.8-36UNF	GH2	PSUN8I2NEX	5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	2	2
No.8-36UNF	GH3	PSUN8I3NEX	5P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	2	2
No.10-24UNC	GH2	PSUNAM2NEX	5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	2	2
No.10-24UNC	GH3	PSUNAM3NEX	5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	2	2
No.10-32UNF	GH2	PSUNAJ2NEX	5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	2	2
No.10-32UNF	GH3	PSUNAJ3NEX	5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	2	2
No.12-24UNC	GH2	PSUNCM2NEX	5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	2	2
No.12-24UNC	GH3	PSUNCM3NEX	5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	2	2
No.12-28UNF	GH2	PSUNCK2NEX	5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	2	2
No.12-28UNF	GH3	PSUNCK3NEX	5P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	2	2
1/4-20UNC	GH3	PSU04N3NEX	4.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-20UNC	GH4	PSU04N4NEX	4.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-20UNC	GH5	PSU04N5NEX	4.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH2	PSU04K2NEX	4.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	PSU04K3NEX	4.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	PSU04K4NEX	4.5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2
5/16-18UNC	GH3	PSU05O3NEX	4.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-18UNC	GH4	PSU05O4NEX	4.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-18UNC	GH5	PSU05O5NEX	4.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	PSU05M3NEX	4.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	PSU05M4NEX	4.5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	PSU06P3NEX	4.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-16UNC	GH5	PSU06P5NEX	4.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	PSU06M3NEX	4.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	PSU06M4NEX	4.5P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	3	3
7/16-14UNC	GH4	PSU07Q4NEX	4.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-14UNC	GH5	PSU07Q5NEX	4.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-20UNF	GH3	PSU07N3NEX	4.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-20UNF	GH4	PSU07N4NEX	4.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
7/16-20UNF	GH5	PSU07N5NEX	4.5P	3.937	0.906	-	2.008	0.323	0.242	0.406	3	5
1/2-13UNC	GH3	PSU08R3NEX	4.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-13UNC	GH4	PSU08R4NEX	4.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-13UNC	GH5	PSU08R5NEX	4.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH3	PSU08N3NEX	4.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH4	PSU08N4NEX	4.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
1/2-20UNF	GH5	PSU08N5NEX	4.5P	4.331	1.024	-	2.205	0.367	0.275	0.437	3	5
9/16-12UNC	GH3	PSU09S3NEX	4.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-12UNC	GH4	PSU09S4NEX	4.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-12UNC	GH5	PSU09S5NEX	4.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-18UNF	GH3	PSU09O3NEX	4.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-18UNF	GH4	PSU09O4NEX	4.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
9/16-18UNF	GH5	PSU09O5NEX	4.5P	4.331	1.024	-	2.205	0.429	0.322	0.5	3	5
5/8-11UNC	GH3	PSU10U3NEX	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-11UNC	GH4	PSU10U4NEX	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-11UNC	GH5	PSU10U5NEX	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-11UNC	GH6	PSU10U6NEX	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5

3

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

③-58

③ Spiral Pointed Tap Series for through 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

PO OX Spiral Pointed Taps, Oxidized

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
5/8-18UNF	GH3	PSU1003NEX	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-18UNF	GH4	PSU1004NEX	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
5/8-18UNF	GH5	PSU1005NEX	4.5P	4.331	1.024	-	2.205	0.48	0.36	0.562	3	5
3/4-10UNC	GH5	PSU12V5NEX	4.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	3	5
3/4-10UNC	GH6	PSU12V6NEX	4.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	3	5
3/4-16UNF	GH3	PSU12P3NEX	4.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	3	5
3/4-16UNF	GH4	PSU12P4NEX	4.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	3	5
3/4-16UNF	GH5	PSU12P5NEX	4.5P	4.921	1.299	-	2.52	0.59	0.442	0.687	3	5
7/8-9UNC	GH4	PSU14W4NEX	4.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
7/8-9UNC	GH5	PSU14W5NEX	4.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
7/8-9UNC	GH6	PSU14W6NEX	4.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
7/8-14UNF	GH4	PSU14Q4NEX	4.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
7/8-14UNF	GH6	PSU14Q6NEX	4.5P	5.512	1.299	-	2.795	0.697	0.523	0.75	3	5
1 -8UNC	GH4	PSU16X4NEX	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 -8UNC	GH5	PSU16X5NEX	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 -8UNC	GH6	PSU16X6NEX	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 -8UNC	GH7	PSU16X7NEX	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 -12UNF	GH4	PSU16S4NEX	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 -12UNF	GH5	PSU16S5NEX	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 -12UNF	GH6	PSU16S6NEX	4.5P	6.299	1.457	-	3.228	0.8	0.6	0.812	3	5
1 1/8-7UNC	GH6	PSU18Y6NEX	4.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/8-7UNC	GH7	PSU18Y7NEX	4.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/8-12UNF	GH5	PSU18S5NEX	4.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/8-12UNF	GH6	PSU18S6NEX	4.5P	7.087	1.732	-	3.622	0.896	0.672	0.875	4	5
1 1/4-7UNC	GH6	PSU20Y6NEX	4.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 1/4-7UNC	GH8	PSU20Y8NEX	4.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 1/4-12UNF	GH5	PSU20S5NEX	4.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 1/4-12UNF	GH6	PSU20S6NEX	4.5P	7.087	1.929	-	3.622	1.021	0.766	1	4	5
1 3/8-6UNC	GH6	PSU22Z6NEX	4.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 3/8-6UNC	GH8	PSU22Z8NEX	4.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 3/8-12UNF	GH5	PSU22S5NEX	4.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 3/8-12UNF	GH6	PSU22S6NEX	4.5P	7.874	2.165	-	4.016	1.108	0.831	1.062	4	5
1 1/2-6UNC	GH6	PSU24Z6NEX	4.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5
1 1/2-6UNC	GH8	PSU24Z8NEX	4.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5
1 1/2-12UNF	GH5	PSU24S5NEX	4.5P	7.874	2.323	-	4.016	1.233	0.925	1.125	4	5
1 1/2-12UNF	GH7	PSU24S7NEX	4.5P	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

③-59

Think threads with
YAMAWA

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

Spiral Pointed Tap Series for through 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

3

DIN

DIN

PO OX

Spiral Pointed Taps, Oxidized

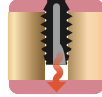


Specification

HSS

OX

Oxide



■ The +PO is a spiral pointed tap for through hole tapping and is suitable for synchronous feed processing in middle to high thread processing of soft steel materials whose chips easily weld to the taps thread such as low carbon steels.

Tapping Speeds depending on Materials

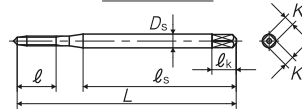
Low carbon steels
低炭素鋼
5~10
(m/min)

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

High carbon steels
高炭素鋼
5~10
(m/min)

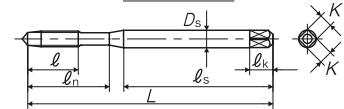
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DIN371

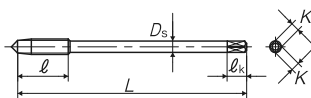


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DIN371

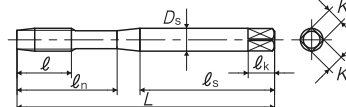


TYPE:3 **DIN376/DIN374**



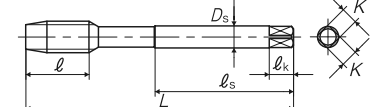
TYPE:4

DIN371



TYPE:5

DIN376/DIN374/DIN5156



Segment : 1F (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												
M2 × 0.4	ISO2	PD2.0EANEX	5P	45	8	-	32	2.8	2.1	5	3	1
M2.2 × 0.45	ISO2	PD2.2FANEX	5P	45	9	-	32	2.8	2.1	5	3	1
M2.3 × 0.4	ISO2	PD2.3EANEX	5P	45	9	-	32	2.8	2.1	5	3	1
M2.5 × 0.45	ISO2	PD2.5FANEX	5P	50	8	15	33	2.8	2.1	5	3	2
M2.6 × 0.45	ISO2	PD2.6FANEX	5P	50	8	15	33	2.8	2.1	5	3	2
M3 × 0.5	ISO2	PD3.0GANEX	5P	56	9	18	34	3.5	2.7	6	3	2
M3 × 0.5	ISO3	PD3.0GMNEX	5P	56	9	18	34	3.5	2.7	6	3	2
M3.5 × 0.6	ISO2	PD3.5HANEX	5P	56	11	20	32	4	3	6	3	2
M4 × 0.7	ISO2	PD4.0IANEX	5P	63	13	21	38	4.5	3.4	6	3	2
M4 × 0.7	ISO2	PG4.0IANEX	5P	63	13	-	-	2.8	2.1	5	3	3
M4 × 0.7	ISO3	PD4.0IMNEX	5P	63	13	21	38	4.5	3.4	6	3	2
M4 × 0.5	ISO2	PM4.0GANEX	5P	63	9	-	-	2.8	2.1	5	3	3
M5 × 0.8	ISO2	PD5.0KANEX	5P	70	14	25	39	6	4.9	8	3	2
M5 × 0.8	ISO2	PG5.0KANEX	5P	70	14	-	-	3.5	2.7	6	3	3
M5 × 0.8	ISO3	PD5.0KMNEX	5P	70	14	25	39	6	4.9	8	3	2
M5 × 0.5	ISO2	PM5.0GANEX	5P	70	11	-	-	3.5	2.7	6	3	3
M6 × 1	ISO2	PD6.0MANEX	5P	80	15	30	45	6	4.9	8	3	2
M6 × 1	ISO2	PG6.0MANEX	5P	80	15	-	-	4.5	3.4	6	3	3
M6 × 1	ISO3	PD6.0MMNEX	5P	80	15	30	45	6	4.9	8	3	2
M6 × 0.75	ISO2	PM6.0JANEX	5P	80	13	-	-	4.5	3.4	6	3	3

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

③-60

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

Think threads with
YAMAWA

③ Spiral Pointed Tap Series for through 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

PO OX Spiral Pointed Taps, Oxidized

	Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
① Spiral Fluted Taps (for blind hole)	M6 × 0.5	ISO2	PM6.0GANEX	5P	80	13	-	-	4.5	3.4	6	3	3
	M7 × 1	ISO2	PD7.0MANEX	5P	80	15	30	45	7	5.5	8	3	4
	M7 × 0.75	ISO2	PM7.0JANEX	5P	80	13	-	41	5.5	4.3	7	3	5
② Spiral Fluted Taps (for through hole)	M7 × 0.5	ISO2	PM7.0GANEX	5P	80	13	-	41	5.5	4.3	7	3	5
	M8 × 1.25	ISO2	PD8.0NANEX	5P	90	19	35	47	8	6.2	9	3	4
	M8 × 1.25	ISO2	PG8.0NANEX	5P	90	19	-	46	6	4.9	8	3	5
③ Spiral Pointed Taps (for through hole)	M8 × 1.25	ISO3	PD8.0NMNEX	5P	90	19	35	47	8	6.2	9	3	4
	M8 × 1	ISO2	PM8.0MANEX	5P	90	19	-	46	6	4.9	8	3	5
	M8 × 0.75	ISO2	PM8.0JANEX	5P	80	19	-	41	6	4.9	8	3	5
④ Hand Taps	M8 × 0.5	ISO2	PM8.0GANEX	5P	80	19	-	41	6	4.9	8	3	5
	M9 × 1.25	ISO2	PD9.0NANEX	5P	90	19	35	48	9	7	10	3	4
	M9 × 1.25	ISO2	PG9.0NANEX	5P	90	19	-	46	7	5.5	8	3	5
⑤ Cemented Carbide Taps	M9 × 1	ISO2	PM9.0MANEX	5P	90	19	-	46	7	5.5	8	3	5
	M10 × 1.5	ISO2	PD010OANEX	5P	100	23	39	52.5	10	8	11	3	4
	M10 × 1.5	ISO2	PG010OANEX	5P	100	23	-	51	7	5.5	8	3	5
⑥ Roll Taps	M10 × 1.5	ISO3	PD010OMNEX	5P	100	23	39	52.5	10	8	11	3	4
	M10 × 1.25	ISO2	PM010NANEX	5P	100	23	-	51	7	5.5	8	3	5
	M10 × 1	ISO2	PM010MANEX	5P	90	19	-	46	7	5.5	8	3	5
⑦ Special Thread Taps Simple Inspection tools	M10 × 0.75	ISO2	PM010JANEX	5P	90	19	-	46	7	5.5	8	3	5
	M11 × 1.5	ISO2	PG011OANEX	5P	100	23	-	51	8	6.2	9	3	5
	M12 × 1.75	ISO2	PG012PANEX	5P	110	26	-	56	9	7	10	3	5
⑧ Pipe Taps	M12 × 1.75	ISO3	PG012PMNEX	5P	110	26	-	56	9	7	10	3	5
	M12 × 1.5	ISO2	PM012OANEX	5P	100	21	-	51	9	7	10	3	5
	M12 × 1.25	ISO2	PM012NANEX	5P	100	21	-	51	9	7	10	3	5
⑨ Thread Mills Premium Thread Mills	M12 × 1	ISO2	PM012MANEX	5P	100	21	-	51	9	7	10	3	5
	M14 × 2	ISO2	PG014QANEX	5P	110	26	-	56	11	9	12	3	5
	M14 × 2	ISO3	PG014QMEX	5P	110	26	-	56	11	9	12	3	5
⑩ Dies	M14 × 1.5	ISO2	PM014OANEX	5P	100	21	-	51	11	9	12	3	5
	M14 × 1.25	ISO2	PM014NANEX	5P	100	21	-	51	11	9	12	3	5
	M14 × 1	ISO2	PM014MANEX	5P	100	21	-	51	11	9	12	3	5
⑪ Center Drills Centering Tools	M16 × 2	ISO2	PG016QANEX	5P	110	26	-	56	12	9	12	3	5
	M16 × 2	ISO3	PG016QMEX	5P	110	26	-	56	12	9	12	3	5
	M16 × 1.5	ISO2	PM016OANEX	5P	100	21	-	51	12	9	12	3	5
⑫ Precision Machinery/ Medical Surgical Instruments	M16 × 1	ISO2	PM016MANEX	5P	100	21	-	51	12	9	12	3	5
	M18 × 2.5	ISO2	PG018RANEX	5P	125	33	-	64	14	11	14	3	5
	M18 × 2	ISO2	PM018QANEX	5P	125	33	-	64	14	11	14	3	5
	M18 × 1.5	ISO2	PM018OANEX	5P	110	24	-	56	14	11	14	3	5
	M18 × 1	ISO2	PM018MANEX	5P	110	24	-	56	14	11	14	3	5
	M20 × 2.5	ISO2	PG020RANEX	5P	140	33	-	71	16	12	15	3	5
	M20 × 2	ISO2	PM020QANEX	5P	140	33	-	71	16	12	15	3	5
	M20 × 1.5	ISO2	PM020OANEX	5P	125	24	-	64	16	12	15	3	5
	M20 × 1	ISO2	PM020MANEX	5P	125	24	-	64	16	12	15	3	5
	M22 × 2.5	ISO2	PG022RANEX	5P	140	33	-	71	18	14.5	17	3	5
	M22 × 2	ISO2	PM022QANEX	5P	140	33	-	71	18	14.5	17	3	5
	M22 × 1.5	ISO2	PM022OANEX	5P	125	24	-	64	18	14.5	17	3	5
	M22 × 1	ISO2	PM022MANEX	5P	125	24	-	64	18	14.5	17	3	5
	M24 × 3	ISO2	PG024SANEX	5P	160	37	-	82	18	14.5	17	3	5
	M24 × 2	ISO2	PM024QANEX	5P	140	27	-	71	18	14.5	17	3	5
	M24 × 1.5	ISO2	PM024OANEX	5P	140	27	-	71	18	14.5	17	3	5
	M24 × 1	ISO2	PM024MANEX	5P	140	27	-	71	18	14.5	17	3	5

DIN

③-61

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

3

DIN

PO OX Spiral Pointed Taps, Oxidized

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M25 × 1.5	ISO2	PM025OANEX	5P	140	27	-	71	18	14.5	17	3	5
M26 × 1.5	ISO2	PM026OANEX	5P	140	27	-	71	18	14.5	17	4	5
M27 × 3	ISO2	PG027SANEX	5P	160	37	-	82	20	16	19	4	5
M27 × 2	ISO2	PM027QANEX	5P	140	27	-	71	20	16	19	4	5
M27 × 1.5	ISO2	PM027OANEX	5P	140	27	-	71	20	16	19	4	5
M27 × 1	ISO2	PM027MANEX	5P	140	27	-	71	20	16	19	4	5
M28 × 2	ISO2	PM028QANEX	5P	140	27	-	71	20	16	19	4	5
M28 × 1.5	ISO2	PM028OANEX	5P	140	27	-	71	20	16	19	4	5
M28 × 1	ISO2	PM028MANEX	5P	140	27	-	71	20	16	19	4	5
M30 × 3.5	ISO2	PG030TANEX	5P	180	44	-	92	22	18	21	4	5
M30 × 2	ISO2	PM030QANEX	5P	150	27	-	77	22	18	21	4	5
M30 × 1.5	ISO2	PM030OANEX	5P	150	27	-	77	22	18	21	4	5
M30 × 1	ISO2	PM030MANEX	5P	150	27	-	77	22	18	21	4	5
M32 × 2	ISO2	PM032QANEX	5P	150	27	-	77	22	18	21	4	5
M32 × 1.5	ISO2	PM032OANEX	5P	150	27	-	77	22	18	21	4	5
M32 × 1	ISO2	PM032MANEX	5P	150	27	-	77	22	18	21	4	5
M33 × 3.5	ISO2	PG033TANEX	5P	180	46	-	92	25	20	23	4	5
M33 × 2	ISO2	PM033QANEX	5P	160	29	-	82	25	20	23	4	5
M33 × 1.5	ISO2	PM033OANEX	5P	160	29	-	82	25	20	23	4	5
M33 × 1	ISO2	PM033MANEX	5P	160	29	-	82	25	20	23	4	5
M36 × 4	ISO2	PG036UANEX	5P	200	52	-	102	28	22	25	4	5
M36 × 3	ISO2	PM036SANEX	5P	200	52	-	102	28	22	25	4	5
M36 × 2	ISO2	PM036QANEX	5P	170	29	-	87	28	22	25	4	5
M36 × 1.5	ISO2	PM036OANEX	5P	170	29	-	87	28	22	25	4	5
M36 × 1	ISO2	PM036MANEX	5P	170	29	-	87	28	22	25	4	5
M39 × 4	ISO2	PG039UANEX	5P	200	52	-	102	32	24	27	4	5
M39 × 2	ISO2	PM039QANEX	5P	170	29	-	87	32	24	27	4	5
M39 × 1.5	ISO2	PM039OANEX	5P	170	29	-	87	32	24	27	4	5
M39 × 1	ISO2	PM039MANEX	5P	170	29	-	87	32	24	27	4	5
M42 × 4.5	ISO2	PG042VANEX	5P	200	59	-	102	32	24	27	4	5
M42 × 2	ISO2	PM042QANEX	5P	170	29	-	87	32	24	27	4	5
M42 × 1.5	ISO2	PM042OANEX	5P	170	29	-	87	32	24	27	4	5
M42 × 1	ISO2	PM042MANEX	5P	170	29	-	87	32	24	27	4	5
M45 × 4.5	ISO2	PG045VANEX	5P	220	59	-	112	36	29	32	4	5
M45 × 3	ISO2	PM045SANEX	5P	200	49	-	102	36	29	32	4	5
M45 × 2	ISO2	PM045QANEX	5P	180	31	-	92	36	29	32	4	5
M45 × 1.5	ISO2	PM045OANEX	5P	180	31	-	92	36	29	32	4	5
M45 × 1	ISO2	PM045MANEX	5P	180	31	-	92	36	29	32	4	5
M48 × 5	ISO2	PG048WANEX	5P	250	65	-	128	36	29	32	4	5
M48 × 3	ISO2	PM048SANEX	5P	225	49	-	115	36	29	32	4	5
M48 × 2	ISO2	PM048QANEX	5P	190	31	-	97	36	29	32	4	5
M48 × 1.5	ISO2	PM048OANEX	5P	190	31	-	97	36	29	32	4	5
M48 × 1	ISO2	PM048MANEX	5P	190	31	-	97	36	29	32	4	5
For Unified Threads												
No.4-40UNC	2B	PDUN4HXNEX	5P	56	9	18	34	3.5	2.7	6	3	2
No.4-48UNF	2B	PDUN4FXNEX	5P	56	9	18	34	3.5	2.7	6	3	2
No.5-40UNC	2B	PDUN5HXNEX	5P	56	11	18	34	3.5	2.7	6	3	2
No.5-44UNF	2B	PDUN5GXNEX	5P	56	11	18	34	3.5	2.7	6	3	2
No.6-32UNC	2B	PDUN6JXNEX	5P	56	11	19	32	4	3	6	3	2
No.6-40UNF	2B	PDUN6HXNEX	5P	56	11	19	32	4	3	6	3	2

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

③-62

③ Spiral Pointed Tap Series for through 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

PO OX Spiral Pointed Taps, Oxidized

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	2B	PDUN8JXNEX	5P	63	13	21	38	4.5	3.4	6	3	2
No.8-36UNF	2B	PDUN8IXNEX	5P	63	13	21	38	4.5	3.4	6	3	2
No.10-24UNC	2B	PDUNAMXNEX	5P	70	14	24	39	6	4.9	8	3	2
No.10-32UNF	2B	PDUNAJXNEX	5P	70	14	24	39	6	4.9	8	3	2
No.12-24UNC	2B	PDUNCMXNEX	5P	80	15	28	45	6	4.9	8	3	2
No.12-28UNF	2B	PDUNCKXNEX	5P	80	15	28	45	6	4.9	8	3	2
1/4-20UNC	2B	PDU04NXNEX	5P	80	15	30	42	7	5.5	8	3	2
1/4-28UNF	2B	PDU04KXNEX	5P	80	15	30	42	7	5.5	8	3	2
5/16-18UNC	2B	PDU05OXNEX	5P	90	19	35	47	8	6.2	9	3	4
5/16-24UNF	2B	PMU05MXNEX	5P	90	19	-	46	6	4.9	8	3	5
3/8-16UNC	2B	PDU06PXNEX	5P	100	23	39	54.5	9	7	10	3	4
3/8-24UNF	2B	PMU06MXNEX	5P	100	23	-	51	7	5.5	8	3	5
7/16-14UNC	2B	PGU07QXNEX	5P	100	23	-	51	8	6.2	9	3	5
7/16-20UNF	2B	PMU07NXNEX	5P	100	23	-	51	8	6.2	9	3	5
1/2-13UNC	2B	PGU08RXNEX	5P	110	26	-	56	9	7	10	3	5
1/2-20UNF	2B	PMU08NXNEX	5P	100	21	-	51	9	7	10	3	5
9/16-12UNC	2B	PGU09SXNEX	5P	110	26	-	56	11	9	12	3	5
9/16-18UNF	2B	PMU09OXNEX	5P	100	21	-	51	11	9	12	3	5
5/8-11UNC	2B	PGU10UXNEX	5P	110	26	-	56	12	9	12	3	5
5/8-18UNF	2B	PMU10OXNEX	5P	100	21	-	51	12	9	12	3	5
3/4-10UNC	2B	PGU12VXNEX	5P	125	33	-	64	14	11	14	3	5
3/4-16UNF	2B	PMU12PXNEX	5P	110	24	-	56	14	11	14	3	5
7/8-9UNC	2B	PGU14WXNEX	5P	140	33	-	71	18	14.5	17	3	5
7/8-14UNF	2B	PMU14QXNEX	5P	125	24	-	64	18	14.5	17	3	5
1 -8UNC	2B	PGU16XXNEX	5P	160	37	-	82	18	14.5	17	3	5
1 -12UNF	2B	PMU16SXNEX	5P	140	27	-	71	18	14.5	17	3	5
1 1/8-7UNC	2B	PGU18YXNEX	5P	180	44	-	92	22	18	21	4	5
1 1/8-12UNF	2B	PMU18SXNEX	5P	150	27	-	77	22	18	21	4	5
1 1/4-7UNC	2B	PGU20YXNEX	5P	180	49	-	92	22	18	21	4	5
1 1/4-12UNF	2B	PMU20SXNEX	5P	150	27	-	77	22	18	21	4	5
1 3/8-6UNC	2B	PGU22ZXNEX	5P	200	55	-	102	28	22	25	4	5
1 3/8-12UNF	2B	PMU22SXNEX	5P	170	29	-	87	28	22	25	4	5
1 1/2-6UNC	2B	PGU24ZXNEX	5P	200	59	-	102	32	24	27	4	5
1 1/2-12UNF	2B	PMU24SXNEX	5P	170	29	-	87	32	24	27	4	5
1 3/4-5UNC	2B	PGU280XNEX	5P	220	65	-	112	36	29	32	4	5
1 3/4-12UN	2B	PMU28SXNEX	5P	180	31	-	92	36	29	32	4	5
For G Threads												
G 1/16-28	-	PVG0010NEX	5P	90	19	-	46	6	4.9	8	3	5
G 1/8-28	-	PVG0020NEX	5P	90	19	-	46	7	5.5	8	3	5
G 1/4-19	-	PVG0040NEX	5P	100	21	-	51	11	9	12	3	5
G 3/8-19	-	PVG0060NEX	5P	100	21	-	51	12	9	12	3	5
G 1/2-14	-	PVG0080NEX	5P	125	24	-	64	16	12	15	3	5
G 5/8-14	-	PVG0100NEX	5P	125	24	-	64	18	14.5	17	3	5
G 3/4-14	-	PVG0120NEX	5P	140	27	-	71	20	16	19	4	5
G 7/8-14	-	PVG0140NEX	5P	150	27	-	77	22	18	21	4	5
G 1 -11	-	PVG0160NEX	5P	160	29	-	82	25	20	23	4	5
G 1 1/8-11	-	PVG0180NEX	5P	170	29	-	87	28	22	25	4	5
G 1 1/4-11	-	PVG0200NEX	5P	170	29	-	87	32	24	27	4	5
G 1 1/2-11	-	PVG0240NEX	5P	190	31	-	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

③-63

Think threads with
YAMAWA

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

Spiral Pointed Tap Series for through 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

3

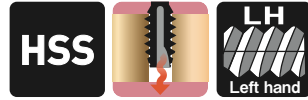
JIS

PO LH

Spiral Pointed Taps for Left Hand Threads



Specification

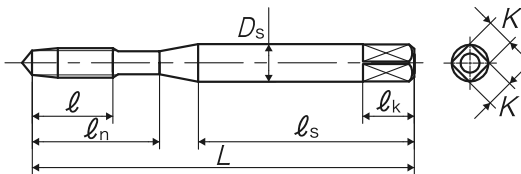


■ The PO LH is a spiral pointed tap for left hand threads in through hole tapping.

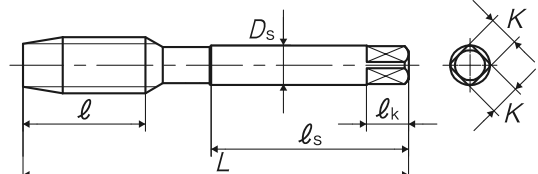
Tapping Speeds depending on Materials

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

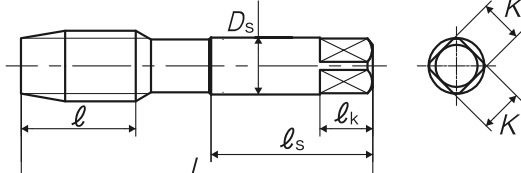
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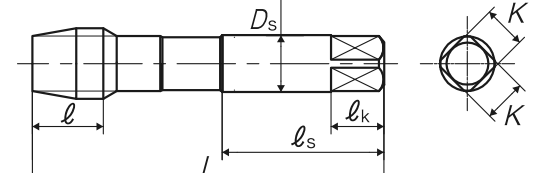
TYPE:2



TYPE:3



TYPE:4



Segment : 1E

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M2 × 0.4	P2	POQ2.0E-L	5P	42	7.2	12	27	3	2.5	5	3	1	¥ 3,680 ※
M3 × 0.5	P2	POQ3.0G-L	5P	46	9	14	26	4	3.2	6	3	1	¥ 1,970 ※
M4 × 0.7	P2	POQ4.0I-L	5P	52	11	17	29	5	4	7	3	1	¥ 1,970 ※
M5 × 0.8	P2	POQ5.0K-L	5P	60	13	22	33	5.5	4.5	7	3	1	¥ 2,000 ※
M6 × 1	P2	POQ6.0M-L	5P	62	15	26	33	6	4.5	7	3	1	¥ 2,190 ※
M8 × 1.25	P3	POR8.0N-L	5P	70	19	-	36	6.2	5	8	3	2	¥ 3,000 ※
M8 × 1	P3	POR8.0M-L	5P	70	19	-	36	6.2	5	8	3	2	¥ 3,410 ※
M10 × 1.5	P3	POR010O-L	5P	75	23	-	38	7	5.5	8	3	2	¥ 3,820 ※
M10 × 1.25	P3	POR010N-L	5P	75	23	-	38	7	5.5	8	3	2	¥ 3,820 ※
M10 × 1	P3	POR010M-L	5P	75	23	-	38	7	5.5	8	3	2	¥ 4,530 ※
M12 × 1.75	P4	POS012P-L	5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,400 ※
M12 × 1.5	P3	POR012O-L	5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,400 ※
M12 × 1.25	P4	POS012N-L	5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,400 ※
M12 × 1	P3	POR012M-L	5P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,360 ※
M14 × 2	P4	POS014Q-L	5P	88	26	-	45	10.5	8	11	3	2	¥ 7,370 ※
M14 × 1.5	P3	POR014O-L	5P	88	26	-	45	10.5	8	11	3	2	¥ 7,370 ※
M16 × 2	P4	POS016Q-L	5P	95	26	-	48	12.5	10	13	3	2	¥ 9,860 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

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

③-64

③ Spiral Pointed Tap Series for through 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

PO LH Spiral Pointed Taps for Left Hand Threads

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M16 × 1.5	P3	POR016O-L	5P	95	26	-	48	12.5	10	13	3	2	¥ 9,860 ※
M18 × 2.5	P4	POS018R-L	5P	100	33	-	51	14	11	14	3	2	¥ 13,200 ※
M18 × 1.5	P4	POS018O-L	5P	100	33	-	51	14	11	14	3	2	¥ 13,200 ※
M20 × 2.5	P4	POS020R-L	5P	105	33	-	50	15	12	15	3	3	¥ 18,000 ※
M20 × 1.5	P4	POS020O-L	5P	105	33	-	50	15	12	15	3	3	¥ 18,000 ※
M20 × 1	P3	POR020M-L	5P	105	18	-	50	15	12	15	3	4	¥ 22,800 ※
M22 × 2.5	P4	POS022R-L	5P	115	33	-	55	17	13	16	3	3	¥ 23,100 ※
M22 × 1.5	P4	POS022O-L	5P	115	33	-	55	17	13	16	3	3	¥ 23,100 ※
M24 × 3	P4	POS024S-L	5P	120	39	-	55	19	15	18	3	3	¥ 28,600 ※
M24 × 2	P4	POS024Q-L	5P	120	39	-	55	19	15	18	3	3	¥ 28,600 ※
M24 × 1.5	P4	POS024O-L	5P	120	39	-	55	19	15	18	3	3	¥ 28,600 ※
M27 × 3	P4	POS027S-L	5P	130	39	-	60	20	15	18	4	3	¥ 39,900 ※
M27 × 1.5	P4	POS027O-L	5P	130	39	-	60	20	15	18	4	3	¥ 39,900 ※
M30 × 3.5	P5	POT030T-L	5P	135	46	-	62	23	17	20	4	3	¥ 50,800 ※
M30 × 1.5	P4	POS030O-L	5P	135	46	-	62	23	17	20	4	3	¥ 50,800 ※
For Unified Threads													
1/4-20UNC	P2	POQU04N-L	5P	62	15	26	33	6	4.5	7	3	1	¥ 2,500 ※
1/4-28UNF	P2	POQU04K-L	5P	62	15	26	33	6	4.5	7	3	1	¥ 2,500 ※
5/16-18UNC	P3	PORU05O-L	5P	70	19	-	36	6.2	5	8	3	2	¥ 3,460 ※
5/16-24UNF	P2	POQU05M-L	5P	70	19	-	36	6.2	5	8	3	2	¥ 3,460 ※
3/8-16UNC	P3	PORU06P-L	5P	75	23	-	38	7	5.5	8	3	2	¥ 4,420 ※
3/8-24UNF	P2	POQU06M-L	5P	75	23	-	38	7	5.5	8	3	2	¥ 4,420 ※
7/16-14UNC	P3	PORU07Q-L	5P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,230 ※
7/16-20UNF	P3	PORU07N-L	5P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,230 ※
1/2-13UNC	P3	PORU08R-L	5P	88	26	-	45	10.5	8	11	3	2	¥ 6,600 ※
1/2-20UNF	P3	PORU08N-L	5P	88	26	-	45	10.5	8	11	3	2	¥ 6,600 ※
For Whitworth Threads													
1/4W20	P3	PORW04N-L	5P	62	15	26	33	6	4.5	7	3	1	¥ 2,500 ※
5/16W18	P3	PORW05O-L	5P	70	19	-	36	6.2	5	8	3	2	¥ 3,460 ※
3/8W16	P3	PORW06P-L	5P	75	23	-	38	7	5.5	8	3	2	¥ 4,420 ※
1/2W12	P3	PORW08S-L	5P	88	26	-	45	10.5	8	11	3	2	¥ 6,600 ※
5/8W11	P3	PORW10U-L	5P	95	26	-	48	12.5	10	13	3	2	¥ 9,860 ※
3/4W10	P4	POSW12V-L	5P	105	33	-	50	15	12	15	3	3	¥ 18,000 ※

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

③-65

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

Spiral Pointed Tap Series for through 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

3

JIS

PO V

Spiral Pointed Taps, Coated



Specification

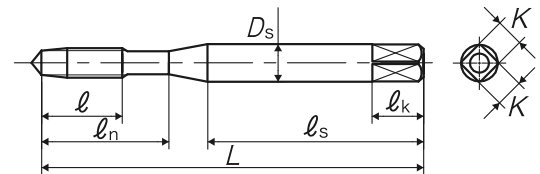


■ Adopting the optimum coating for the tapping condition.

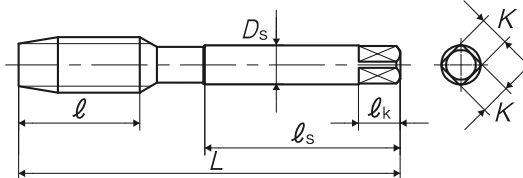
Tapping Speeds depending on Materials

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

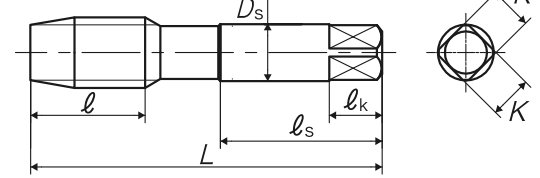
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1E

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M2 × 0.4	P2	VPOQ2.0E	5P	42	7.2	12	27	3	2.5	5	3	1	¥ 4,710 *
M2.5 × 0.45	P2	VPOQ2.5F	5P	46	8.1	14	29	3	2.5	5	3	1	¥ 4,110 *
M2.6 × 0.45	P2	VPOQ2.6F	5P	46	8.1	14	29	3	2.5	5	3	1	¥ 4,110 *
M3 × 0.5	P2	VPOQ3.0G	5P	46	9	14	26	4	3.2	6	3	1	¥ 3,570
M4 × 0.7	P2	VPOQ4.0I	5P	52	11	17	29	5	4	7	3	1	¥ 3,570
M5 × 0.8	P2	VPOQ5.0K	5P	60	13	22	33	5.5	4.5	7	3	1	¥ 3,580
M6 × 1	P2	VPOQ6.0M	5P	62	15	26	33	6	4.5	7	3	1	¥ 3,600
M8 × 1.25	P3	VPOR8.0N	5P	70	19	-	36	6.2	5	8	3	2	¥ 4,700
M10 × 1.5	P3	VPOR10.0O	5P	75	23	-	38	7	5.5	8	3	2	¥ 5,620
M10 × 1.25	P3	VPOR10.1N	5P	75	23	-	38	7	5.5	8	3	2	¥ 5,620
M12 × 1.75	P4	VPOS12.1P	5P	82	26	-	42	8.5	6.5	9	3	2	¥ 7,360
M12 × 1.5	P3	VPOR12.0O	5P	82	26	-	42	8.5	6.5	9	3	2	¥ 7,360
M12 × 1.25	P4	VPOS12.1N	5P	82	26	-	42	8.5	6.5	9	3	2	¥ 7,360
M14 × 2	P4	VPOS14.1Q	5P	88	26	-	45	10.5	8	11	3	2	¥ 9,420 *
M18 × 2.5	P4	VPOS18.1R	5P	100	33	-	51	14	11	14	3	2	¥ 16,500 *
M20 × 2.5	P4	VPOS20.1R	5P	105	33	-	50	15	12	15	3	3	¥ 20,600 *

* = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

Spiral Fluted Taps
(for blind hole)

Spiral Fluted Taps
(for through hole)

Spiral Pointed Taps
(for through hole)

Hand Taps

Cemented
Carbide Taps

Roll Taps

Special Thread Taps
Simple Inspection Tools

Pipe Taps

Thread Mills
Premium Thread Mills

Dies

Center Drills
Centering Tools

Precision Machinery/
Medical Surgical Instruments

JIS

③-66

③ Spiral Pointed Tap Series for through 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

PO V

Spiral Pointed Taps, Coated



Specification

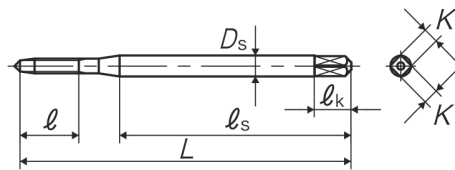


■ Adopting the optimum coating for the tapping condition.

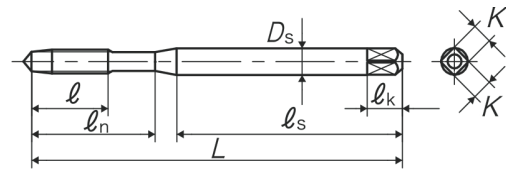
Tapping Speeds depending on Materials

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

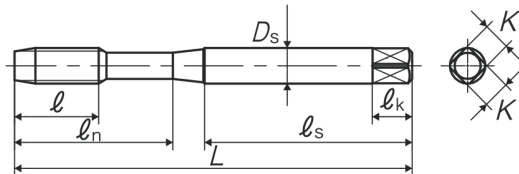
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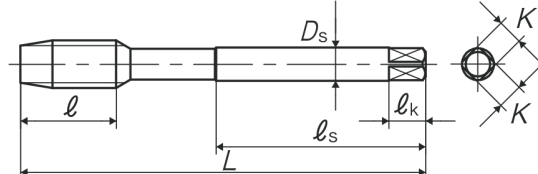
TYPE:2



TYPE:3



TYPE:4



Segment : 1F (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												
M2 × 0.4	ISO2	96302.0T1	5P	45	8	-	32	2.8	2.1	5	3	1
M2.5 × 0.45	ISO2	96302.5T1	5P	50	8	15	33	2.8	2.1	5	3	2
M3 × 0.5	ISO2	96303.0T1	5P	56	9	18	34	3.5	2.7	6	3	2
M3 × 0.5	ISO3	96303.06GT1	5P	56	9	18	34	3.5	2.7	6	3	2
M3.5 × 0.6	ISO2	96303.5T1	5P	56	11	20	32	4	3	6	3	2
M4 × 0.7	ISO2	96304.0T1	5P	63	13	21	38	4.5	3.4	6	3	2
M4 × 0.7	ISO3	96304.06GT1	5P	63	13	21	38	4.5	3.4	6	3	2
M5 × 0.8	ISO2	96305.0T1	5P	70	14	25	39	6	4.9	8	3	2
M5 × 0.8	ISO3	96305.06GT1	5P	70	14	25	39	6	4.9	8	3	2
M6 × 1	ISO2	96306.0T1	5P	80	15	30	45	6	4.9	8	3	2
M6 × 1	ISO3	96306.06GT1	5P	80	15	30	45	6	4.9	8	3	2
M8 × 1.25	ISO2	96308.0T1	5P	90	19	35	47	8	6.2	9	3	3
M8 × 1.25	ISO3	96308.06GT1	5P	90	19	35	47	8	6.2	9	3	3
M8 × 1	ISO2	98308.0MT1	5P	90	19	-	46	6	4.9	8	3	4
M10 × 1.5	ISO2	9630010T1	5P	100	23	39	52.5	10	8	11	3	3
M10 × 1.5	ISO3	96300106GT1	5P	100	23	39	52.5	10	8	11	3	3

DIN

③-67

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

3

DIN

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M10 × 1.25	ISO2	9830010NTI	5P	100	23	-	51	7	5.5	8	3	4
M10 × 1	ISO2	9830010MTI	5P	90	19	-	46	7	5.5	8	3	4
M12 × 1.75	ISO2	9730012TI	5P	110	26	-	56	9	7	10	3	4
M12 × 1.5	ISO2	9830012OTI	5P	100	21	-	51	9	7	10	3	4
M12 × 1.25	ISO2	9830012NTI	5P	100	21	-	51	9	7	10	3	4
M14 × 2	ISO2	9730014TI	5P	110	26	-	56	11	9	12	3	4
M14 × 1.5	ISO2	9830014OTI	5P	100	21	-	51	11	9	12	3	4
M16 × 2	ISO2	9730016TI	5P	110	26	-	56	12	9	12	3	4
M16 × 1.5	ISO2	9830016OTI	5P	100	21	-	51	12	9	12	3	4
M18 × 2.5	ISO2	9730018TI	5P	125	33	-	64	14	11	14	3	4
M18 × 1.5	ISO2	9830018OTI	5P	110	24	-	56	14	11	14	3	4
M20 × 2.5	ISO2	9730020TI	5P	140	33	-	71	16	12	15	3	4
M20 × 1.5	ISO2	9830020OTI	5P	125	24	-	64	16	12	15	3	4
M22 × 2.5	ISO2	9730022TI	5P	140	33	-	71	18	14.5	17	3	4
M24 × 3	ISO2	9730024TI	5P	160	37	-	82	18	14.5	17	3	4
For G Threads												
G 1/8-28	-	9930R02TI	5P	90	19	-	46	7	5.5	8	3	4
G 1/4-19	-	9930R04TI	5P	100	21	-	51	11	9	12	3	4
G 3/8-19	-	9930R06TI	5P	100	21	-	51	12	9	12	3	4
G 1/2-14	-	9930R08TI	5P	125	24	-	64	16	12	15	3	4

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

③-68

③ Spiral Pointed Tap Series for through 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

LS-PO

Long Shank Spiral Pointed Taps



Specification

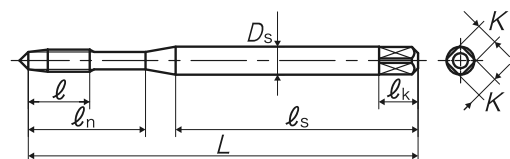


■ Long shank spiral pointed taps for tapping threads in deep holes that cannot be reached with a standard overall length.

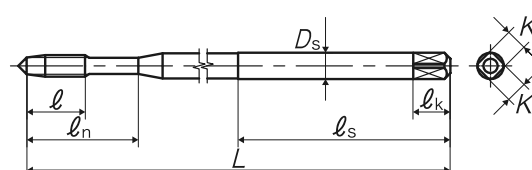
Tapping Speeds depending on Materials

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

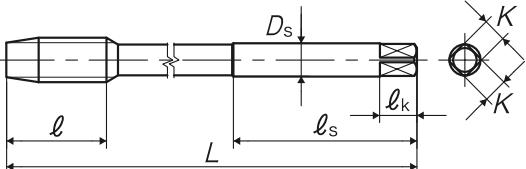
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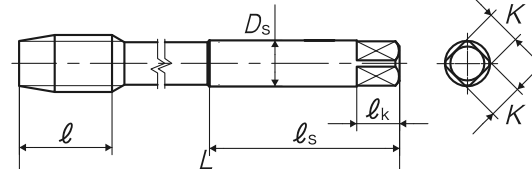
TYPE:2



TYPE:3



TYPE:4



Segment : 1E

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M2 × 0.4	P2	POFQ2.0EL07	5P	70	7.2	15	52	3	2.5	5	3	1	¥ 4,630 ※
M2.3 × 0.4	P2	POFQ2.3EL07	5P	70	7.2	15	52	3	2.5	5	3	1	¥ 4,170 ※
M2.5 × 0.45	P2	POFQ2.5FL07	5P	70	8.1	15	52	3	2.5	5	3	1	¥ 3,650 ※
M2.6 × 0.45	P2	POFQ2.6FL07	5P	70	8.1	15	52	3	2.5	5	3	1	¥ 3,650 ※
M3 × 0.5	P2	POFQ3.0GL07	5P	70	9	18	46	4	3.2	6	3	1	¥ 2,840 ※
M3 × 0.5	P2	POFQ3.0GL10	5P	100	9	18	40	4	3.2	6	3	2	¥ 4,120 ※
M3 × 0.5	P2	POFQ3.0GL12	5P	120	9	18	40	4	3.2	6	3	2	¥ 4,940 ※
M3 × 0.5	P2	POFQ3.0GL15	5P	150	9	18	40	4	3.2	6	3	2	¥ 7,770 ※
M3 × 0.5	P3	POFR3.0GL10	5P	100	9	18	40	4	3.2	6	3	2	¥ 4,120 ※
M3 × 0.5	P3	POFR3.0GL15	5P	150	9	18	40	4	3.2	6	3	2	¥ 7,770 ※
M4 × 0.7	P2	POFQ4.0IL07	5P	70	11	21	43	5	4	7	3	1	¥ 2,480 ※
M4 × 0.7	P2	POFQ4.0IL10	5P	100	11	21	40	5	4	7	3	2	¥ 3,770 ※
M4 × 0.7	P2	POFQ4.0IL12	5P	120	11	21	40	5	4	7	3	2	¥ 4,660 ※
M4 × 0.7	P2	POFQ4.0IL15	5P	150	11	21	40	5	4	7	3	2	¥ 7,180 ※

JIS

③-69

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

3

JIS

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	P3	POFR4.0IL10	5P	100	11	21	40	5	4	7	3	2	¥ 3,770 ※
M4 × 0.7	P3	POFR4.0IL15	5P	150	11	21	40	5	4	7	3	2	¥ 7,180 ※
M5 × 0.8	P2	POFQ5.0KL10	5P	100	13	25	40	5.5	4.5	7	3	2	¥ 3,300
M5 × 0.8	P2	POFQ5.0KL12	5P	120	13	25	40	5.5	4.5	7	3	2	¥ 4,110 ※
M5 × 0.8	P2	POFQ5.0KL15	5P	150	13	25	40	5.5	4.5	7	3	2	¥ 5,580
M5 × 0.8	P3	POFR5.0KL10	5P	100	13	25	40	5.5	4.5	7	3	2	¥ 3,300 ※
M5 × 0.8	P3	POFR5.0KL15	5P	150	13	25	40	5.5	4.5	7	3	2	¥ 5,580 ※
M5 × 0.8	P4	POFS5.0KL15	5P	150	13	25	40	5.5	4.5	7	3	2	¥ 5,580 ※
M6 × 1	P2	POFQ6.0ML10	5P	100	15	30	40	6	4.5	7	3	2	¥ 2,820
M6 × 1	P2	POFQ6.0ML12	5P	120	15	30	40	6	4.5	7	3	2	¥ 3,630 ※
M6 × 1	P2	POFQ6.0ML15	5P	150	15	30	40	6	4.5	7	3	2	¥ 4,980
M6 × 1	P2	POFQ6.0ML20	5P	200	15	30	40	6	4.5	7	3	2	¥ 6,880 ※
M6 × 1	P3	POFR6.0ML10	5P	100	15	30	40	6	4.5	7	3	2	¥ 2,820 ※
M6 × 1	P3	POFR6.0ML15	5P	150	15	30	40	6	4.5	7	3	2	¥ 4,980 ※
M6 × 1	P4	POFS6.0ML15	5P	150	15	30	40	6	4.5	7	3	2	¥ 4,980 ※
M8 × 1.25	P3	POR8.0NL10	5P	100	19	-	50	6.2	5	8	3	3	¥ 3,580
M8 × 1.25	P3	POR8.0NL12	5P	120	19	-	50	6.2	5	8	3	3	¥ 4,440 ※
M8 × 1.25	P3	POR8.0NL15	5P	150	19	-	50	6.2	5	8	3	3	¥ 6,100
M8 × 1.25	P3	POR8.0NL20	5P	200	19	-	50	6.2	5	8	3	3	¥ 9,030 ※
M8 × 1.25	P4	POS8.0NL10	5P	100	19	-	50	6.2	5	8	3	3	¥ 3,580 ※
M8 × 1.25	P4	POS8.0NL15	5P	150	19	-	50	6.2	5	8	3	3	¥ 6,100 ※
M8 × 1	P3	POR8.0ML10	5P	100	19	-	50	6.2	5	8	3	3	¥ 3,860 ※
M8 × 1	P3	POR8.0ML12	5P	120	19	-	50	6.2	5	8	3	3	¥ 5,000 ※
M8 × 1	P3	POR8.0ML15	5P	150	19	-	50	6.2	5	8	3	3	¥ 6,380 ※
M10 × 1.5	P3	POR010OL10	5P	100	23	-	50	7	5.5	8	3	3	¥ 4,350
M10 × 1.5	P3	POR010OL12	5P	120	23	-	50	7	5.5	8	3	3	¥ 5,160 ※
M10 × 1.5	P3	POR010OL15	5P	150	23	-	50	7	5.5	8	3	3	¥ 7,100
M10 × 1.5	P3	POR010OL20	5P	200	23	-	50	7	5.5	8	3	3	¥ 9,870 ※
M10 × 1.5	P4	POS010OL10	5P	100	23	-	50	7	5.5	8	3	3	¥ 4,350 ※
M10 × 1.5	P4	POS010OL15	5P	150	23	-	50	7	5.5	8	3	3	¥ 7,100 ※
M10 × 1.25	P3	POR010NL10	5P	100	23	-	50	7	5.5	8	3	3	¥ 4,350
M10 × 1.25	P3	POR010NL12	5P	120	23	-	50	7	5.5	8	3	3	¥ 5,160 ※
M10 × 1.25	P3	POR010NL15	5P	150	23	-	50	7	5.5	8	3	3	¥ 7,100
M10 × 1.25	P3	POR010NL20	5P	200	23	-	50	7	5.5	8	3	3	¥ 9,870 ※
M10 × 1.25	P4	POS010NL15	5P	150	23	-	50	7	5.5	8	3	3	¥ 7,100 ※
M10 × 1	P3	POR010ML10	5P	100	23	-	50	7	5.5	8	3	3	¥ 4,700 ※
M10 × 1	P3	POR010ML12	5P	120	23	-	50	7	5.5	8	3	3	¥ 5,400 ※
M10 × 1	P3	POR010ML15	5P	150	23	-	50	7	5.5	8	3	3	¥ 8,010 ※
M12 × 1.75	P4	POS012PL10	5P	100	26	-	50	8.5	6.5	9	3	3	¥ 5,330 ※
M12 × 1.75	P4	POS012PL12	5P	120	26	-	50	8.5	6.5	9	3	3	¥ 6,180 ※
M12 × 1.75	P4	POS012PL15	5P	150	26	-	50	8.5	6.5	9	3	3	¥ 8,890
M12 × 1.75	P4	POS012PL20	5P	200	26	-	50	8.5	6.5	9	3	3	¥ 12,500
M12 × 1.75	P5	POT012PL15	5P	150	26	-	50	8.5	6.5	9	3	3	¥ 8,890 ※
M12 × 1.5	P3	POR012OL10	5P	100	26	-	50	8.5	6.5	9	3	3	¥ 5,330 ※
M12 × 1.5	P3	POR012OL12	5P	120	26	-	50	8.5	6.5	9	3	3	¥ 6,180 ※
M12 × 1.5	P3	POR012OL15	5P	150	26	-	50	8.5	6.5	9	3	3	¥ 8,890 ※
M12 × 1.5	P3	POR012OL20	5P	200	26	-	50	8.5	6.5	9	3	3	¥ 12,500 ※
M12 × 1.5	P4	POS012OL15	5P	150	26	-	50	8.5	6.5	9	3	3	¥ 8,890 ※
M12 × 1.25	P4	POS012NL10	5P	100	26	-	50	8.5	6.5	9	3	3	¥ 5,330 ※
M12 × 1.25	P4	POS012NL12	5P	120	26	-	50	8.5	6.5	9	3	3	¥ 6,180 ※

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

③-70

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

③ Spiral Pointed Tap Series for through 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-PO Long Shank Spiral Pointed Taps

	Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
① Spiral Fluted Taps (for blind hole)	M12 × 1.25	P4	POS012NL15	5P	150	26	-	50	8.5	6.5	9	3	3	¥ 8,890 ※
	M12 × 1.25	P4	POS012NL20	5P	200	26	-	50	8.5	6.5	9	3	3	¥ 12,500 ※
	M12 × 1.25	P5	POT012NL15	5P	150	26	-	50	8.5	6.5	9	3	3	¥ 8,890 ※
② Spiral Fluted Taps (for through hole)	M12 × 1	P3	POR012ML10	5P	100	26	-	50	8.5	6.5	9	3	3	¥ 6,480 ※
	M12 × 1	P3	POR012ML15	5P	150	26	-	50	8.5	6.5	9	3	3	¥ 11,100 ※
	M14 × 2	P4	POS014QL12	5P	120	26	-	60	10.5	8	11	3	3	¥ 8,140 ※
③ Spiral Pointed Taps (for through hole)	M14 × 2	P4	POS014QL15	5P	150	26	-	60	10.5	8	11	3	3	¥ 11,200 ※
	M14 × 2	P4	POS014QL20	5P	200	26	-	60	10.5	8	11	3	3	¥ 15,000 ※
	M14 × 2	P5	POT014QL15	5P	150	26	-	60	10.5	8	11	3	3	¥ 11,200 ※
④ Hand Taps	M14 × 1.5	P3	POR014OL12	5P	120	26	-	60	10.5	8	11	3	3	¥ 8,140 ※
	M14 × 1.5	P3	POR014OL15	5P	150	26	-	60	10.5	8	11	3	3	¥ 11,200 ※
	M14 × 1.5	P3	POR014OL20	5P	200	26	-	60	10.5	8	11	3	3	¥ 15,000 ※
⑤ Cemented Carbide Taps	M14 × 1.5	P4	POS014OL15	5P	150	26	-	60	10.5	8	11	3	3	¥ 11,200 ※
	M14 × 1.5	P5	POT014OL15	5P	150	26	-	60	10.5	8	11	3	3	¥ 11,200 ※
	M16 × 2	P4	POS016QL15	5P	150	26	-	60	12.5	10	13	3	3	¥ 12,100 ※
⑥ Roll Taps	M16 × 2	P4	POS016QL20	5P	200	26	-	60	12.5	10	13	3	3	¥ 16,000 ※
	M16 × 2	P4	POS016QL25	5P	250	26	-	60	12.5	10	13	3	3	¥ 19,900 ※
	M16 × 2	P5	POT016QL15	5P	150	26	-	60	12.5	10	13	3	3	¥ 12,100 ※
⑦ Special Thread Taps Simple Inspection tools	M16 × 1.5	P3	POR016OL15	5P	150	26	-	60	12.5	10	13	3	3	¥ 12,100 ※
	M16 × 1.5	P3	POR016OL20	5P	200	26	-	60	12.5	10	13	3	3	¥ 16,000 ※
	M16 × 1.5	P5	POT016OL15	5P	150	26	-	60	12.5	10	13	3	3	¥ 12,100 ※
⑧ Pipe Taps	M18 × 2.5	P4	POS018RL15	5P	150	33	-	70	14	11	14	3	3	¥ 16,600 ※
	M18 × 2.5	P4	POS018RL20	5P	200	33	-	70	14	11	14	3	3	¥ 20,800 ※
	M18 × 2.5	P5	POT018RL15	5P	150	33	-	70	14	11	14	3	3	¥ 16,600 ※
⑨ Thread Mills Premium Thread Mills	M18 × 2	P4	POS018QL20	5P	200	33	-	70	14	11	14	3	3	¥ 20,800 ※
	M18 × 1.5	P4	POS018OL15	5P	150	33	-	70	14	11	14	3	3	¥ 16,600 ※
	M18 × 1.5	P4	POS018OL20	5P	200	33	-	70	14	11	14	3	3	¥ 20,800 ※
⑩ Dies	M20 × 2.5	P4	POS020RL15	5P	150	33	-	70	15	12	15	3	4	¥ 21,300 ※
	M20 × 2.5	P4	POS020RL20	5P	200	33	-	70	15	12	15	3	4	¥ 26,500 ※
	M20 × 2.5	P4	POS020RL25	5P	250	33	-	70	15	12	15	3	4	¥ 33,700 ※
⑪ Center Drills Centering Tools	M20 × 2.5	P5	POT020RL15	5P	150	33	-	70	15	12	15	3	4	¥ 21,300 ※
	M20 × 2	P4	POS020QL20	5P	200	33	-	70	15	12	15	3	4	¥ 26,500 ※
	M20 × 1.5	P4	POS020OL15	5P	150	33	-	70	15	12	15	3	4	¥ 21,300 ※
⑫ Precision Machinery/ Medical Surgical Instruments	M20 × 1.5	P4	POS020OL20	5P	200	33	-	70	15	12	15	3	4	¥ 26,500 ※
	M22 × 2.5	P4	POS022RL15	5P	150	33	-	70	17	13	16	3	4	¥ 23,600 ※
	M22 × 2.5	P4	POS022RL20	5P	200	33	-	70	17	13	16	3	4	¥ 29,300 ※
	M22 × 2.5	P4	POS022RL25	5P	250	33	-	70	17	13	16	3	4	¥ 36,200 ※
	M22 × 2	P4	POS022QL20	5P	200	33	-	70	17	13	16	3	4	¥ 29,300 ※
	M22 × 1.5	P4	POS022OL15	5P	150	33	-	70	17	13	16	3	4	¥ 23,600 ※
	M22 × 1.5	P4	POS022OL20	5P	200	33	-	70	17	13	16	3	4	¥ 29,300 ※
	M24 × 3	P4	POS024SL15	5P	150	39	-	80	19	15	18	3	4	¥ 27,500 ※
	M24 × 3	P4	POS024SL20	5P	200	39	-	80	19	15	18	3	4	¥ 33,000 ※
	M24 × 3	P4	POS024SL25	5P	250	39	-	80	19	15	18	3	4	¥ 41,800 ※
	M24 × 2	P4	POS024QL20	5P	200	39	-	80	19	15	18	3	4	¥ 33,000 ※
	M24 × 1.5	P4	POS024OL15	5P	150	39	-	80	19	15	18	3	4	¥ 27,500 ※
	M24 × 1.5	P4	POS024OL20	5P	200	39	-	80	19	15	18	3	4	¥ 33,000 ※
	M27 × 3	P4	POS027SL20	5P	200	39	-	80	20	15	18	4	4	¥ 37,600 ※
	M27 × 3	P4	POS027SL25	5P	250	39	-	80	20	15	18	4	4	¥ 48,700 ※
	M27 × 2	P4	POS027QL25	5P	250	39	-	80	20	15	18	4	4	¥ 48,700 ※
	M27 × 1.5	P4	POS027OL20	5P	200	39	-	80	20	15	18	4	4	¥ 37,600 ※

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

3

JIS

LS-PO Long Shank Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M27 × 1.5	P4	POS027OL25	5P	250	39	-	80	20	15	18	4	4	¥ 48,700 ※
M30 × 3.5	P5	POT030TL20	5P	200	46	-	80	23	17	20	4	4	¥ 48,300 ※
M30 × 3.5	P5	POT030TL25	5P	250	46	-	80	23	17	20	4	4	¥ 61,200 ※
M30 × 3.5	P5	POT030TL30	5P	300	46	-	80	23	17	20	4	4	¥ 70,400 ※
M30 × 3	P4	POS030SL20	5P	200	46	-	80	23	17	20	4	4	¥ 48,300 ※
M30 × 3	P4	POS030SL25	5P	250	46	-	80	23	17	20	4	4	¥ 61,200 ※
M30 × 2	P4	POS030QL20	5P	200	46	-	80	23	17	20	4	4	¥ 48,300 ※
M30 × 2	P4	POS030QL25	5P	250	46	-	80	23	17	20	4	4	¥ 61,200 ※
M30 × 1.5	P4	POS030OL20	5P	200	46	-	80	23	17	20	4	4	¥ 48,300 ※
M30 × 1.5	P4	POS030OL25	5P	250	46	-	80	23	17	20	4	4	¥ 61,200 ※
M30 × 1.5	P4	POS030OL30	5P	300	46	-	80	23	17	20	4	4	¥ 70,400 ※
M33 × 3.5	P5	POT033TL25	5P	250	51	-	80	25	19	22	4	4	¥ 70,200 ※
M33 × 3.5	P5	POT033TL30	5P	300	51	-	80	25	19	22	4	4	¥ 80,900 ※
M36 × 4	P5	POT036UL25	5P	250	57	-	100	28	21	24	4	4	¥ 72,900 ※
M36 × 4	P5	POT036UL30	5P	300	57	-	100	28	21	24	4	4	¥ 84,500 ※
For Unified Threads													
1/4-20UNC	P2	POFQU04NL10	5P	100	15	30	40	6	4.5	7	3	2	¥ 3,060 ※
1/4-20UNC	P2	POFQU04NL15	5P	150	15	30	40	6	4.5	7	3	2	¥ 4,940 ※
1/4-28UNF	P2	POFQU04KL10	5P	100	15	30	40	6	4.5	7	3	2	¥ 3,060 ※
1/4-28UNF	P2	POFQU04KL15	5P	150	15	30	40	6	4.5	7	3	2	¥ 4,940 ※
5/16-18UNC	P3	PORU05OL10	5P	100	19	-	50	6.2	5	8	3	3	¥ 3,640 ※
5/16-18UNC	P3	PORU05OL15	5P	150	19	-	50	6.2	5	8	3	3	¥ 6,080 ※
5/16-24UNF	P2	POQU05ML10	5P	100	19	-	50	6.2	5	8	3	3	¥ 3,640 ※
5/16-24UNF	P2	POQU05ML15	5P	150	19	-	50	6.2	5	8	3	3	¥ 6,080 ※
3/8-16UNC	P3	PORU06PL10	5P	100	23	-	50	7	5.5	8	3	3	¥ 4,440 ※
3/8-16UNC	P3	PORU06PL15	5P	150	23	-	50	7	5.5	8	3	3	¥ 7,210 ※
3/8-24UNF	P2	POQU06ML10	5P	100	23	-	50	7	5.5	8	3	3	¥ 4,440 ※
3/8-24UNF	P2	POQU06ML15	5P	150	23	-	50	7	5.5	8	3	3	¥ 7,210 ※
7/16-14UNC	P3	PORU07QL15	5P	150	26	-	50	8.5	6.5	9	3	3	¥ 8,530 ※
7/16-20UNF	P3	PORU07NL15	5P	150	26	-	50	8.5	6.5	9	3	3	¥ 8,530 ※
1/2-13UNC	P3	PORU08RL15	5P	150	26	-	60	10.5	8	11	3	3	¥ 9,030 ※
1/2-13UNC	P3	PORU08RL20	5P	200	26	-	60	10.5	8	11	3	3	¥ 12,900 ※
1/2-20UNF	P3	PORU08NL15	5P	150	26	-	60	10.5	8	11	3	3	¥ 9,030 ※
1/2-20UNF	P3	PORU08NL20	5P	200	26	-	60	10.5	8	11	3	3	¥ 12,900 ※
5/8-11UNC	P3	PORU10UL15	5P	150	26	-	60	12.5	10	13	3	3	¥ 12,500 ※
5/8-11UNC	P3	PORU10UL20	5P	200	26	-	60	12.5	10	13	3	3	¥ 16,200 ※
5/8-18UNF	P3	PORU10OL15	5P	150	26	-	60	12.5	10	13	3	3	¥ 12,500 ※
5/8-18UNF	P3	PORU10OL20	5P	200	26	-	60	12.5	10	13	3	3	¥ 16,200 ※
3/4-10UNC	P4	POSU12VL15	5P	150	33	-	70	15	12	15	3	4	¥ 21,600 ※
3/4-10UNC	P4	POSU12VL20	5P	200	33	-	70	15	12	15	3	4	¥ 27,500 ※
3/4-16UNF	P3	PORU12PL15	5P	150	33	-	70	15	12	15	3	4	¥ 21,600 ※
3/4-16UNF	P3	PORU12PL20	5P	200	33	-	70	15	12	15	3	4	¥ 27,500 ※
7/8-9UNC	P4	POSU14WL20	5P	200	33	-	70	17	13	16	3	4	¥ 29,300 ※
7/8-14UNF	P3	PORU14QL20	5P	200	33	-	70	17	13	16	3	4	¥ 29,300 ※
1 -8UNC	P4	POSU16XL15	5P	150	39	-	80	19	15	18	3	4	¥ 28,700 ※
1 -8UNC	P4	POSU16XL20	5P	200	39	-	80	19	15	18	3	4	¥ 35,700 ※
1 -12UNF	P4	POSU16SL20	5P	200	39	-	80	19	15	18	3	4	¥ 35,700 ※
For Whitworth Threads													
1/4W20	P3	POFRW04NL10	5P	100	15	30	40	6	4.5	7	3	2	¥ 3,060 ※
1/4W20	P3	POFRW04NL15	5P	150	15	30	40	6	4.5	7	3	2	¥ 4,940 ※

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

③-72

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

③ Spiral Pointed Tap Series for through 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-PO Long Shank Spiral Pointed Taps

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
5/16W18	P3	PORW05OL10	5P	100	19	-	50	6.2	5	8	3	3	¥ 3,640 ※
5/16W18	P3	PORW05OL15	5P	150	19	-	50	6.2	5	8	3	3	¥ 6,080 ※
3/8W16	P3	PORW06PL10	5P	100	23	-	50	7	5.5	8	3	3	¥ 4,440 ※
3/8W16	P3	PORW06PL15	5P	150	23	-	50	7	5.5	8	3	3	¥ 7,210 ※
7/16W14	P3	PORW07QL15	5P	150	26	-	50	8.5	6.5	9	3	3	¥ 8,530 ※
1/2W12	P3	PORW08SL15	5P	150	26	-	60	10.5	8	11	3	3	¥ 9,030 ※
1/2W12	P3	PORW08SL20	5P	200	26	-	60	10.5	8	11	3	3	¥ 12,900 ※
5/8W11	P3	PORW10UL15	5P	150	26	-	60	12.5	10	13	3	3	¥ 12,500 ※
5/8W11	P3	PORW10UL20	5P	200	26	-	60	12.5	10	13	3	3	¥ 16,200 ※
3/4W10	P4	POSW12VL15	5P	150	33	-	70	15	12	15	3	4	¥ 21,600 ※
3/4W10	P4	POSW12VL20	5P	200	33	-	70	15	12	15	3	4	¥ 27,500 ※
7/8W9	P4	POSW14WL15	5P	150	33	-	70	17	13	16	3	4	¥ 24,100 ※
7/8W9	P4	POSW14WL20	5P	200	33	-	70	17	13	16	3	4	¥ 29,300 ※
1 W8	P4	POSW16XL15	5P	150	39	-	80	19	15	18	3	4	¥ 28,700 ※
1 W8	P4	POSW16XL20	5P	200	39	-	80	19	15	18	3	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

M E M O

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

③ Spiral Pointed Tap Series for through 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

③-75

S

LS-PO V

Long Shank Spiral Pointed Taps, Coated



Specification

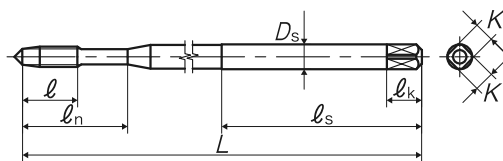


■ Long shank coated spiral fluted taps for tapping threads in deep holes that cannot be reached with a standard overall length.

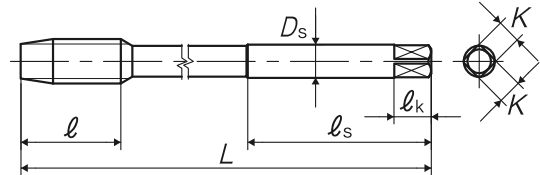
Tapping Speeds depending on Materials

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 : 1E

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	VPOFQ3.0GL10	5P	100	9	18	40	4	3.2	6	3	1	¥ 6,720
M4 × 0.7	P2	VPOFQ4.0IL10	5P	100	11	21	40	5	4	7	3	1	¥ 6,300
M5 × 0.8	P2	VPOFQ5.0KL10	5P	100	13	25	40	5.5	4.5	7	3	1	¥ 5,900
M6 × 1	P2	VPOFQ6.0ML10	5P	100	15	30	40	6	4.5	7	3	1	¥ 5,360
M6 × 1	P2	VPOFQ6.0ML15	5P	150	15	30	40	6	4.5	7	3	1	¥ 7,470 ※
M8 × 1.25	P3	VPOR8.0NL10	5P	100	19	-	50	6.2	5	8	3	2	¥ 6,570
M8 × 1.25	P3	VPOR8.0NL15	5P	150	19	-	50	6.2	5	8	3	2	¥ 9,080
M10 × 1.5	P3	VPOR010OL15	5P	150	23	-	50	7	5.5	8	3	2	¥ 10,600
M10 × 1.25	P3	VPOR010NL15	5P	150	23	-	50	7	5.5	8	3	2	¥ 10,600 ※
M12 × 1.75	P4	VPOS012PL15	5P	150	26	-	50	8.5	6.5	9	3	2	¥ 13,400
M12 × 1.5	P3	VPOR012OL15	5P	150	26	-	50	8.5	6.5	9	3	2	¥ 13,400 ※
M12 × 1.25	P4	VPOS012NL15	5P	150	26	-	50	8.5	6.5	9	3	2	¥ 13,400 ※

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	ℓ_n	ℓ_s	Ds	K	ℓ_k

3

JIS

LS-PO-K

Long Shank Spiral Pointed Taps with Long Neck



Specification

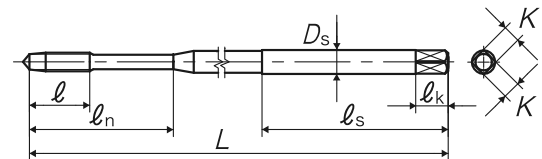


Long shank spiral pointed taps with long neck for tapping threads in deep holes that cannot be reached with a standard overall length. The long neck enables deep hole tapping.

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: 1E

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	PY3.0GQFEBE	4.5P	100	9	28	40	4	3.2	6	3	1	¥ 4,340 *
M3 × 0.5	P2	PY3.0GQFEBF	4.5P	120	9	28	40	4	3.2	6	3	1	¥ 5,200 *
M3 × 0.5	P2	PY3.0GQFEBG	4.5P	150	9	28	40	4	3.2	6	3	1	¥ 8,180 *
M4 × 0.7	P2	PY4.0IQFEBE	4.5P	100	11	31	40	5	4	7	3	1	¥ 3,960 *
M4 × 0.7	P2	PY4.0IQFEBF	4.5P	120	11	31	40	5	4	7	3	1	¥ 4,900 *
M4 × 0.7	P2	PY4.0IQFEBG	4.5P	150	11	31	40	5	4	7	3	1	¥ 7,550 *
M5 × 0.8	P2	PY5.0KQFEBE	4.5P	100	13	38	40	5.5	4.5	7	3	1	¥ 3,470 *
M5 × 0.8	P2	PY5.0KQFEBF	4.5P	120	13	38	40	5.5	4.5	7	3	1	¥ 4,320 *
M5 × 0.8	P2	PY5.0KQFEBG	4.5P	150	13	38	40	5.5	4.5	7	3	1	¥ 5,870 *
M6 × 1	P2	PY6.0MQFEBE	4.5P	100	15	45	40	6	4.5	7	3	1	¥ 2,970 *
M6 × 1	P2	PY6.0MQFEBF	4.5P	120	15	45	40	6	4.5	7	3	1	¥ 3,820 *
M6 × 1	P2	PY6.0MQFEBG	4.5P	150	15	45	40	6	4.5	7	3	1	¥ 5,240 *

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

③-76

③ Spiral Pointed Tap Series for through 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

③-77



SU+PO SU-PO

Spiral Pointed Taps for Stainless Steels



Specification



• Product Name and Size.

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

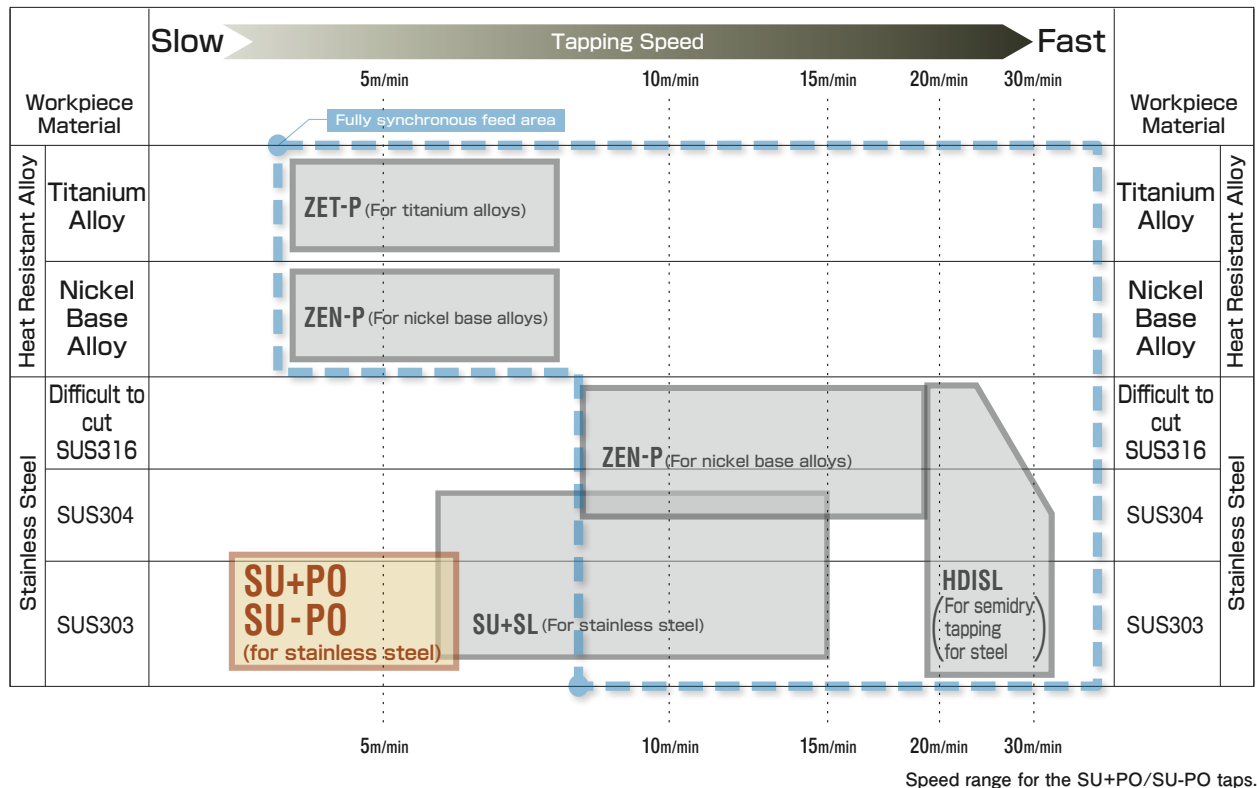
Tapping Speeds depending on Materials

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

- The SU+PO/SU-PO taps are designed for stainless steel that causes work harden easily. The cutting geometry is also suited for tapping through holes in chromium steel and molybdenum steel.
- To prevent chip welding, the tap's surface is oxidized.

Comparison chart



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

3

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

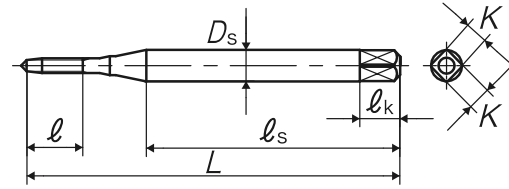
Precision Machinery/
Medical Surgical Instruments

⑫

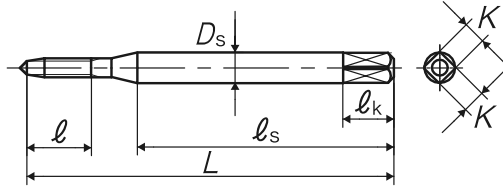
JIS

③-78

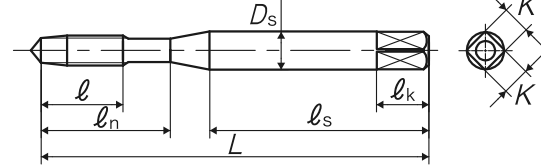
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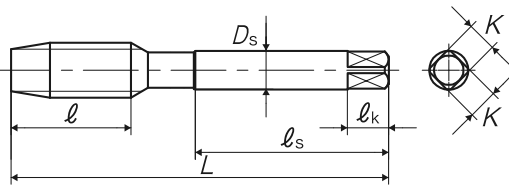
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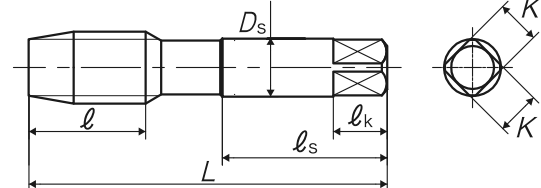
TYPE: 3



TYPE: 4



TYPE: 5



SU+PO Spiral Pointed Taps for Stainless Steels

○ Oversize

Segment : 1E

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M1.4 × 0.3	P1	PUPP1.4C	5P	36	5.4	-	24	3	2.5	5	2	1	¥ 4,050 ※
M1.6 × 0.35	P2	PUPQ1.6D	5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,870 ※
M1.7 × 0.35	P2	PUPQ1.7D	5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,870 ※
M2 × 0.4	P2	PUPQ2.0E	5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,910
M2 × 0.4	P3	PUPR2.0E	5P	42	7.2	12	27	3	2.5	5	2	3	¥ 3,090 ※
M2.3 × 0.4	P2	PUPQ2.3E	5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,820
M2.3 × 0.4	P3	PUPR2.3E	5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,820 ※
M2.5 × 0.45	P2	PUPQ2.5F	5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,360
M2.5 × 0.45	P3	PUPR2.5F	5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,360 ※
M2.6 × 0.45	P2	PUPQ2.6F	5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,360
M2.6 × 0.45	P3	PUPR2.6F	5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,360 ※

SU-PO Spiral Pointed Taps for Stainless Steels

○ Oversize

Segment : 1E

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M3 × 0.5	P2	PUMQ3.0G	5P	46	9	14	26	4	3.2	6	3	3	¥ 1,560
M3 × 0.5	P3	PUMR3.0G	5P	46	9	14	26	4	3.2	6	3	3	¥ 1,660 ※
M3 × 0.5	P4	PUMS3.0G	5P	46	9	14	26	4	3.2	6	3	3	¥ 1,660 ※
3M0.6	P2	PUMQ3.0H	5P	46	9	14	26	4	3.2	6	3	3	¥ 1,660 ※
M3.5 × 0.6	P2	PUMQ3.5H	5P	52	11	16	29	5	4	7	3	3	¥ 1,660
M4 × 0.7	P2	PUMQ4.0I	5P	52	11	17	29	5	4	7	3	3	¥ 1,560
M4 × 0.7	P3	PUMR4.0I	5P	52	11	17	29	5	4	7	3	3	¥ 1,660 ※
M4 × 0.7	P4	PUMS4.0I	5P	52	11	17	29	5	4	7	3	3	¥ 1,660 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

③ Spiral Pointed Tap Series for through 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-PO Spiral Pointed Taps for Stainless Steels

	Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
① Spiral Fluted Taps (for blind hole)	4M0.75	P2	PUMQ4.0J	5P	52	11	17	29	5	4	7	3	3	¥ 1,660 ※
	M5 × 0.8	P2	PUMQ5.0K	5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,590
	M5 × 0.8	P3	PUMR5.0K	5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,680 ※
② Spiral Fluted Taps (for through hole)	M5 × 0.8	P4	PUMS5.0K	5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,680 ※
	5M0.9	P2	PUMQ5.0L	5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,680 ※
	M6 × 1	P2	PUMQ6.0M	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,720
③ Spiral Pointed Taps (for through hole)	M6 × 1	P3	PUMR6.0M	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,840 ※
	M6 × 1	P4	PUMS6.0M	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,840 ※
	M6 × 0.75	P2	PUMQ6.0J	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,590 ※
④ Hand Taps	M7 × 1	P2	PUMQ7.0M	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,240 ※
	M8 × 1.25	P3	PUMR8.0N	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,420
	M8 × 1.25	P4	PUMS8.0N	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,570 ※
⑤ Cemented Carbide Taps	M8 × 1.25	P5	PUMT8.0N	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,570 ※
	M8 × 1	P3	PUMR8.0M	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,920
	M10 × 1.5	P3	PUMR010O	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,060
⑥ Roll Taps	M10 × 1.5	P4	PUMS010O	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,260 ※
	M10 × 1.5	P5	PUMT010O	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,260 ※
	M10 × 1.25	P3	PUMR010N	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,060
⑦ Special Thread Taps Simple Inspection tools	M10 × 1.25	P4	PUMS010N	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,260 ※
	M10 × 1	P3	PUMR010M	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,880 ※
	M12 × 1.75	P4	PUMS012P	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,340
⑧ Pipe Taps	M12 × 1.75	P5	PUMT012P	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,620 ※
	M12 × 1.5	P3	PUMR012O	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,340 ※
	M12 × 1.5	P5	PUMT012O	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,620 ※
⑨ Thread Mills Premium Thread Mills	M12 × 1.25	P4	PUMS012N	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,340
	M12 × 1.25	P5	PUMT012N	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,620 ※
	M12 × 1	P3	PUMR012M	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 5,450 ※
⑩ Dies	M14 × 2	P4	PUMS014Q	5P	88	26	-	45	10.5	8	11	3	4	¥ 6,300
	M14 × 2	P5	PUMT014Q	5P	88	26	-	45	10.5	8	11	3	4	¥ 6,300 ※
	M14 × 1.5	P3	PUMR014O	5P	88	26	-	45	10.5	8	11	3	4	¥ 6,300
⑪ Center Drills Centering Tools	M14 × 1.5	P5	PUMT014O	5P	88	26	-	45	10.5	8	11	3	4	¥ 6,300 ※
	M14 × 1	P3	PUMR014M	5P	88	26	-	45	10.5	8	11	3	4	¥ 7,320 ※
	M15 × 1.5	P3	PUMR015O	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
⑫ Precision Machinery/ Medical Surgical Instruments	M15 × 1	P3	PUMR015M	5P	95	26	-	48	12.5	10	13	3	4	¥ 10,100 ※
	M16 × 2	P4	PUMS016Q	5P	95	26	-	48	12.5	10	13	3	4	¥ 7,920
	M16 × 2	P5	PUMT016Q	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
	M16 × 2	P6	PUMU016Q	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
	M16 × 1.5	P3	PUMR016O	5P	95	26	-	48	12.5	10	13	3	4	¥ 7,920
	M16 × 1.5	P5	PUMT016O	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
	M16 × 1	P3	PUMR016M	5P	95	26	-	48	12.5	10	13	3	4	¥ 10,100 ※
	M18 × 2.5	P4	PUMS018R	5P	100	33	-	51	14	11	14	3	4	¥ 11,300 ※
	M18 × 2.5	P5	PUMT018R	5P	100	33	-	51	14	11	14	3	4	¥ 11,300 ※
	M18 × 2.5	P6	PUMU018R	5P	100	33	-	51	14	11	14	3	4	¥ 11,300 ※
	M18 × 1.5	P4	PUMS018O	5P	100	33	-	51	14	11	14	3	4	¥ 11,300 ※
	M18 × 1.5	P5	PUMT018O	5P	100	33	-	51	14	11	14	3	4	¥ 11,300 ※
	M20 × 2.5	P4	PUMS020R	5P	105	33	-	50	15	12	15	3	5	¥ 15,500
	M20 × 2.5	P5	PUMT020R	5P	105	33	-	50	15	12	15	3	5	¥ 15,500 ※
	M20 × 2.5	P6	PUMU020R	5P	105	33	-	50	15	12	15	3	5	¥ 15,500 ※
	M20 × 1.5	P4	PUMS020O	5P	105	33	-	50	15	12	15	3	5	¥ 15,500 ※
	M20 × 1.5	P5	PUMT020O	5P	105	33	-	50	15	12	15	3	5	¥ 15,500 ※

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

SU-PO Spiral Pointed Taps for Stainless Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M22 × 2.5	P4	PUMS022R	5P	115	33	-	55	17	13	16	3	5	¥ 19,800 ※
M22 × 2.5	P5	PUMT022R	5P	115	33	-	55	17	13	16	3	5	¥ 19,800 ※
M22 × 2.5	P6	PUMU022R	5P	115	33	-	55	17	13	16	3	5	¥ 19,800 ※
M22 × 1.5	P4	PUMS022O	5P	115	33	-	55	17	13	16	3	5	¥ 19,800 ※
M22 × 1.5	P5	PUMT022O	5P	115	33	-	55	17	13	16	3	5	¥ 19,800 ※
M24 × 3	P4	PUMS024S	5P	120	39	-	55	19	15	18	3	5	¥ 24,500 ※
M24 × 3	P5	PUMT024S	5P	120	39	-	55	19	15	18	3	5	¥ 24,500 ※
M24 × 3	P6	PUMU024S	5P	120	39	-	55	19	15	18	3	5	¥ 24,500 ※
M24 × 1.5	P4	PUMS024O	5P	120	39	-	55	19	15	18	3	5	¥ 24,500 ※
M27 × 3	P4	PUMS027S	5P	130	39	-	60	20	15	18	4	5	¥ 34,400 ※
M27 × 1.5	P4	PUMS027O	5P	130	39	-	60	20	15	18	4	5	¥ 34,400 ※
M30 × 3.5	P5	PUMT030T	5P	135	46	-	62	23	17	20	4	5	¥ 43,800 ※
M30 × 1.5	P4	PUMS030O	5P	135	46	-	62	23	17	20	4	5	¥ 43,800 ※
M33 × 3.5	P5	PUMT033T	5P	145	46	-	67	25	19	22	4	5	¥ 50,900 ※
M36 × 4	P5	PUMT036U	5P	155	52	-	71	28	21	24	4	5	¥ 59,000 ※
M39 × 4	P5	PUMT039U	5P	165	52	-	76	30	23	26	4	5	¥ 67,700 ※
M42 × 4.5	P5	PUMT042V	5P	175	59	-	81	32	26	30	4	5	¥ 82,300 ※
For Unified Threads													
No.2-56UNC	P1	PUMPUN2E	5P	42	8.1	12	27	3	2.5	5	2	3	¥ 3,230 ※
No.4-40UNC	P2	PUMQUN4H	5P	46	9	14	25	4	3.2	6	2	3	¥ 2,090 ※
No.4-48UNF	P1	PUMPUN4F	5P	46	9	14	25	4	3.2	6	2	3	¥ 2,090 ※
No.5-40UNC	P2	PUMQUN5H	5P	52	11	16	28	5	4	7	3	3	¥ 1,950 ※
No.5-44UNF	P1	PUMPUN5G	5P	52	11	16	28	5	4	7	3	3	¥ 1,950 ※
No.6-32UNC	P2	PUMQUN6J	5P	52	11	17	27	5	4	7	3	3	¥ 1,950 ※
No.6-40UNF	P2	PUMQUN6H	5P	52	11	17	27	5	4	7	3	3	¥ 1,950 ※
No.8-32UNC	P2	PUMQUN8J	5P	60	13	22	31	5.5	4.5	7	3	3	¥ 1,970 ※
No.8-36UNF	P2	PUMQUN8I	5P	60	13	22	31	5.5	4.5	7	3	3	¥ 1,970 ※
No.10-24UNC	P2	PUMQUNAM	5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,970 ※
No.10-32UNF	P2	PUMQUNAJ	5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,970 ※
No.12-24UNC	P2	PUMQUNCM	5P	62	15	26	32	6	4.5	7	3	3	¥ 2,100 ※
No.12-28UNF	P2	PUMQUNCK	5P	62	15	26	32	6	4.5	7	3	3	¥ 2,100 ※
1/4-20UNC	P2	PUMQU04N	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,100 ※
1/4-28UNF	P2	PUMQU04K	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,100 ※
5/16-18UNC	P3	PUMRU05O	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,960 ※
5/16-24UNF	P2	PUMQU05M	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,960 ※
3/8-16UNC	P3	PUMRU06P	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,790 ※
3/8-24UNF	P2	PUMQU06M	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,790 ※
7/16-14UNC	P3	PUMRU07Q	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 5,330 ※
7/16-20UNF	P3	PUMRU07N	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 5,330 ※
1/2-13UNC	P3	PUMRU08R	5P	88	26	-	45	10.5	8	11	3	4	¥ 5,650 ※
1/2-20UNF	P3	PUMRU08N	5P	88	26	-	45	10.5	8	11	3	4	¥ 5,650 ※
9/16-18UNF	P3	PUMRU09O	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
5/8-11UNC	P3	PUMRU10U	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
5/8-18UNF	P3	PUMRU10O	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
3/4-10UNC	P4	PUMSU12V	5P	105	33	-	50	15	12	15	3	5	¥ 15,500 ※
3/4-16UNF	P3	PUMRU12P	5P	105	33	-	50	15	12	15	3	5	¥ 15,500 ※
For Whitworth Threads													
3/16W24	P2	PUMQW03M	5P	60	13	21	32	5.5	4.5	7	3	3	¥ 1,970 ※
1/4W20	P3	PUMRW04N	5P	62	15	26	33	6	4.5	7	3	3	¥ 2,100 ※
5/16W18	P3	PUMRW05O	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,960 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

3

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

③-80

③ Spiral Pointed Tap Series for through 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-PO Spiral Pointed Taps for Stainless Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
3/8W16	P3	PUMRW06P	5P	75	23	-	38	7	5.5	8	3	4	¥ 3,790 ※
7/16W14	P3	PUMRW07Q	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 5,330 ※
1/2W12	P3	PUMRW08S	5P	88	26	-	45	10.5	8	11	3	4	¥ 5,650 ※
5/8W11	P3	PUMRW10U	5P	95	26	-	48	12.5	10	13	3	4	¥ 8,430 ※
3/4W10	P4	PUMSW12V	5P	105	33	-	50	15	12	15	3	5	¥ 15,500 ※
1 W8	P4	PUMSW16X	5P	125	39	-	58	19	15	18	3	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

③-81

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

M E M O

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

③ Spiral Pointed Tap Series for through hole

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

Spiral Pointed Taps for Stainless Steels



Specification

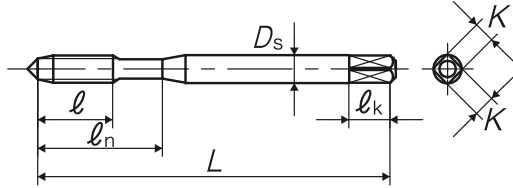


■ Suitable for stainless steels tending to cause work harden and sticky, as well as chrome steels and molybdenum steels. Through hole use.

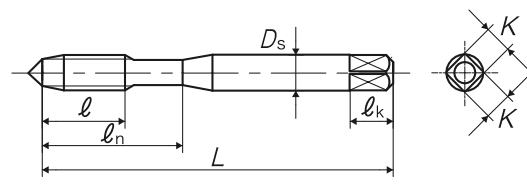
Tapping Speed depending on Materials

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

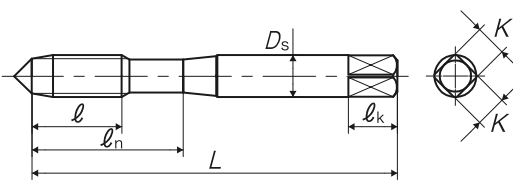
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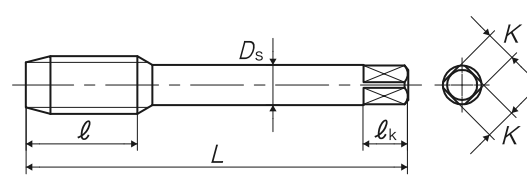
TYPE:2



TYPE:3



TYPE:4



Segment : 1F

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ _n (inch)	D _s (inch)	K (inch)	ℓ _k (inch)	No. of flutes	TYPE
For Metric Threads											
M3 × 0.5	D3	Y72615	4.5P	1.937	0.374	0.625	0.141	0.11	0.187	3	1
M3.5 × 0.6	D4	Y72616	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
M4 × 0.7	D4	Y72617	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
M5 × 0.8	D4	Y72619	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
M6 × 1	D5	Y72620	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
M7 × 1	D5	Y72621	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
M8 × 1.25	D5	Y72623	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
M8 × 1	D5	Y72622	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
M10 × 1.5	D6	Y72625	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
M10 × 1.25	D5	Y72624	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
M12 × 1.75	D6	Y72627	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
M12 × 1.25	D5	Y72626	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
M14 × 2	D7	Y72629	4.5P	3.593	0.984	-	0.429	0.322	0.5	3	4
M14 × 1.5	D6	Y72628	4.5P	3.593	0.984	-	0.429	0.322	0.5	3	4
M16 × 2	D7	Y72631	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
M16 × 1.5	D6	Y72630	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
M18 × 2.5	D7	Y72633	4.5P	4.031	1.083	-	0.542	0.406	0.625	3	4

ANSI

③-83

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

3

ANSI

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M18 × 1.5	D6	Y72632	4.5P	4.031	1.083	-	0.542	0.406	0.625	3	4
For Unified Threads											
No.2-56UNC	GH2	Y82623	4.5P	1.75	0.256	0.437	0.141	0.11	0.187	2	1
No.2-56UNC	GH3	Y82624	4.5P	1.75	0.256	0.437	0.141	0.11	0.187	2	1
No.3-48UNC	GH2	Y82600	4.5P	1.812	0.295	0.5	0.141	0.11	0.187	2	1
No.4-40UNC	GH2	Y82601	4.5P	1.875	0.335	0.562	0.141	0.11	0.187	2	1
No.4-40UNC	GH3	Y82602	4.5P	1.875	0.335	0.562	0.141	0.11	0.187	2	1
No.4-40UNC	GH4	Y82612	4.5P	1.875	0.335	0.562	0.141	0.11	0.187	2	1
No.4-40UNC	GH5	Y82634	4.5P	1.875	0.335	0.562	0.141	0.11	0.187	2	1
No.4-48UNF	GH2	Y82683	4.5P	1.875	0.335	0.562	0.141	0.11	0.187	2	1
No.5-40UNC	GH2	Y82603	4.5P	1.937	0.374	0.625	0.141	0.11	0.187	3	1
No.6-32UNC	GH2	Y82604	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH3	Y82605	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH4	Y82608	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH5	Y82635	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH6	Y82659	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH7	Y82665	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
No.6-40UNF	GH2	Y82684	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
No.6-40UNF	GH3	Y82642	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
No.8-32UNC	GH2	Y82606	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH3	Y82607	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH4	Y82629	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH5	Y82637	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH6	Y82660	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH7	Y82667	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
No.8-36UNF	GH2	Y82686	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
No.10-24UNC	GH3	Y82609	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH5	Y82639	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH6	Y82690	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH7	Y82669	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH2	Y82611	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH3	Y82610	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH4	Y82630	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH5	Y82640	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH6	Y82661	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH7	Y82670	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.12-24UNC	GH3	Y82688	4.5P	2.375	0.571	0.937	0.22	0.165	0.281	3	1
No.12-28UNF	GH3	Y82689	4.5P	2.375	0.571	0.937	0.22	0.165	0.281	3	1
1/4-20UNC	GH3	Y82613	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-20UNC	GH5	Y82643	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-20UNC	GH6	Y82590	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-20UNC	GH7	Y82673	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	Y82614	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	Y82631	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH5	Y82644	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH6	Y82662	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH7	Y82674	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
5/16-18UNC	GH3	Y82615	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-18UNC	GH5	Y82645	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-18UNC	GH7	Y82675	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3

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

③-84

 Think threads with
YAMAWA

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

③ Spiral Pointed Tap Series for through 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 PO Spiral Pointed Taps for Stainless Steels

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
5/16-24UNF	GH3	Y82616	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	Y82632	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH5	Y82646	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH6	Y82663	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH7	Y82676	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	Y82617	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-16UNC	GH5	Y82647	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-16UNC	GH7	Y82668	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	Y82618	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	Y82633	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH5	Y82648	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH6	Y82664	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH7	Y82678	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
7/16-14UNC	GH3	Y82619	4.5P	3.156	0.866	-	0.323	0.242	0.406	3	4
7/16-14UNC	GH5	Y82649	4.5P	3.156	0.866	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH3	Y82620	4.5P	3.156	0.866	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH5	Y82650	4.5P	3.156	0.866	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH6	Y82691	4.5P	3.156	0.866	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH7	Y82680	4.5P	3.156	0.866	-	0.323	0.242	0.406	3	4
1/2-13UNC	GH3	Y82621	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH5	Y82651	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH7	Y82681	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	Y82622	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH5	Y82652	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH6	Y82692	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH7	Y82682	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH9	Y82685	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
9/16-12UNC	GH3	Y82653	4.5P	3.593	0.984	-	0.429	0.322	0.5	3	4
9/16-18UNF	GH3	Y82654	4.5P	3.593	0.984	-	0.429	0.322	0.5	3	4
9/16-18UNF	GH5	Y82666	4.5P	3.593	0.984	-	0.429	0.322	0.5	3	4
5/8-11UNC	GH3	Y82625	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
5/8-11UNC	GH5	Y82655	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH3	Y82626	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH4	Y82636	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH5	Y82656	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH6	Y82694	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH7	Y82591	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
3/4-10UNC	GH3	Y82627	4.5P	4.25	1.201	-	0.59	0.422	0.687	3	4
3/4-10UNC	GH5	Y82657	4.5P	4.25	1.201	-	0.59	0.422	0.687	3	4
3/4-16UNF	GH3	Y82628	4.5P	4.25	1.201	-	0.59	0.422	0.687	3	4
3/4-16UNF	GH5	Y82658	4.5P	4.25	1.201	-	0.59	0.422	0.687	3	4
3/4-16UNF	GH7	Y82592	4.5P	4.25	1.201	-	0.59	0.422	0.687	3	4
7/8-9UNC	GH4	Y82695	4.5P	4.687	1.339	-	0.697	0.523	0.75	3	4
7/8-14UNF	GH4	Y82696	4.5P	4.687	1.339	-	0.697	0.523	0.75	3	4
7/8-14UNF	GH6	Y82699	4.5P	4.687	1.339	-	0.697	0.523	0.75	3	4
1 -8UNC	GH4	Y82697	4.5P	5.125	1.496	-	0.8	0.6	0.812	3	4
1 -12UNF	GH4	Y82679	4.5P	5.125	1.496	-	0.8	0.6	0.812	3	4
1 1/8-7UNC	GH6	Y82700	4.5P	5.437	1.535	-	0.896	0.672	0.875	4	4
1 1/8-12UNF	GH5	Y82701	4.5P	5.437	1.535	-	0.896	0.672	0.875	4	4
1 1/4-7UNC	GH6	Y82702	4.5P	5.75	1.535	-	1.021	0.766	1	4	4

ANSI

③-85

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 PO Spiral Pointed Taps for Stainless Steels

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
1 1/4-12UNF	GH5	Y82703	4.5P	5.75	1.535	-	1.021	0.766	1	4	4
1 3/8-6UNC	GH6	Y82705	4.5P	6.062	1.811	-	1.108	0.831	1.062	4	4
1 3/8-12UNF	GH5	Y82706	4.5P	6.062	1.811	-	1.108	0.831	1.062	4	4
1 1/2-6UNC	GH6	Y82707	4.5P	6.375	1.811	-	1.233	0.925	1.125	4	4
1 1/2-12UNF	GH5	Y82708	4.5P	6.375	1.811	-	1.233	0.925	1.125	4	4
1 3/4-5UNC	GH7	Y82709	4.5P	7	1.929	-	1.43	1.072	1.25	4	4
2 -4 1/2UNC	GH7	Y82710	4.5P	7.625	1.929	-	1.644	1.233	1.375	4	4

3

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

③-86

③ Spiral Pointed Tap Series for through 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

PO-VA

Spiral Pointed Taps for Stainless Steels

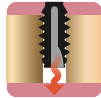


Specification

HSS

OX

Oxide



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

Tapping Speeds depending on Materials

Low carbon steels
低炭素鋼
~15
(m/min)

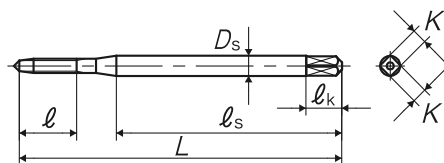
Medium carbon steels
中炭素鋼
~15
(m/min)

High carbon steels
高炭素鋼
~15
(m/min)

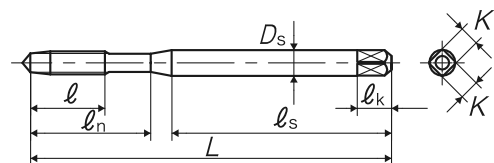
Alloy steels
合金鋼
~15
(m/min)

Stainless steels
ステンレス鋼
~10
(m/min)

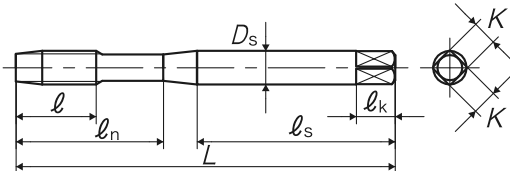
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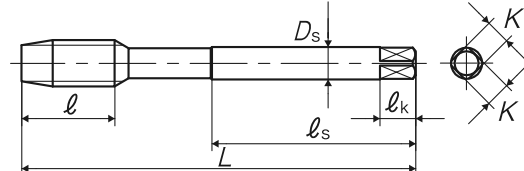
TYPE:2



TYPE:3



TYPE:4



Segment : 1F (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												
M2 × 0.4	ISO2X	PD2.0EBGEX	4.5P	45	8	-	32	2.8	2.1	5	2	1
M2.5 × 0.45	ISO2X	PD2.5FBGEX	4.5P	50	8	15	33	2.8	2.1	5	2	2
M3 × 0.5	ISO2X	PD3.0GBGEX	4.5P	56	9	18	34	3.5	2.7	6	3	2
M4 × 0.7	ISO2X	PD4.0IBGEX	4.5P	63	13	21	38	4.5	3.4	6	3	2
M5 × 0.8	ISO2X	PD5.0KBGEX	4.5P	70	14	25	39	6	4.9	8	3	2
M6 × 1	ISO2X	PD6.0MBGEX	4.5P	80	15	30	45	6	4.9	8	3	2
M8 × 1.25	ISO2X	PD8.0NBGEX	4.5P	90	19	35	47	8	6.2	9	3	3
M8 × 1.25	ISO2X	PG8.0NBGEX	4.5P	90	19	-	46	6	4.9	8	3	4
M8 × 1	ISO2X	PM8.0MBGEX	4.5P	90	19	-	46	6	4.9	8	3	4
M8 × 1	ISO3	PM8.0MMGEX	4.5P	90	19	-	46	6	4.9	8	3	4
M10 × 1.5	ISO2X	PD10.0OBGEX	4.5P	100	23	39	52.5	10	8	11	3	3
M10 × 1.5	ISO2X	PG10.0OBGEX	4.5P	100	23	-	51	7	5.5	8	3	4
M10 × 1.25	ISO2X	PM10.1NBGEX	4.5P	100	23	-	51	7	5.5	8	3	4
M10 × 1	ISO2X	PM10.1MBGEX	4.5P	90	19	-	46	7	5.5	8	3	4
M12 × 1.75	ISO2X	PG12.2PBGEX	4.5P	110	26	-	56	9	7	10	3	4
M12 × 1.5	ISO2X	PM12.0OBGEX	4.5P	100	21	-	51	9	7	10	3	4
M12 × 1.25	ISO2X	PM12.1NBGEX	4.5P	100	21	-	51	9	7	10	3	4

DIN

③-87

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

3

DIN

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M12 × 1	ISO2X	PM012MBGEX	4.5P	100	21	-	51	9	7	10	3	4
M14 × 2	ISO2X	PG014QBGEX	4.5P	110	26	-	56	11	9	12	3	4
M14 × 1.5	ISO2X	PM014OBGEX	4.5P	100	21	-	51	11	9	12	3	4
M16 × 2	ISO2X	PG016QBGEX	4.5P	110	26	-	56	12	9	12	3	4
M16 × 1.5	ISO2X	PM016OBGEX	4.5P	100	21	-	51	12	9	12	3	4
M18 × 2.5	ISO2X	PG018RBGEX	4.5P	125	33	-	64	14	11	14	3	4
M18 × 1.5	ISO2X	PM018OBGEX	4.5P	110	24	-	56	14	11	14	3	4
M20 × 2.5	ISO2X	PG020RBGEX	4.5P	140	33	-	71	16	12	15	3	4
M20 × 1.5	ISO2X	PM020OBGEX	4.5P	125	24	-	64	16	12	15	3	4
M22 × 2.5	ISO2X	PG022RBGEX	4.5P	140	33	-	71	18	14.5	17	3	4
M22 × 1.5	ISO2X	PM022OBGEX	4.5P	125	24	-	64	18	14.5	17	3	4
M24 × 3	ISO2X	PG024SBGEX	4.5P	160	37	-	82	18	14.5	17	3	4
M24 × 1.5	ISO2X	PM024OBGEX	4.5P	140	27	-	71	18	14.5	17	3	4
M27 × 3	ISO2X	PG027SBGEX	4.5P	160	37	-	82	20	16	19	4	4
M30 × 3.5	ISO2X	PG030TBGEX	4.5P	180	44	-	92	22	18	21	4	4
M36 × 4	ISO2X	PG036UBGEX	4.5P	200	52	-	102	28	22	25	4	4
For Unified Threads												
No.4-40UNC	2BX	PDUN4HYGEX	4.5P	56	9	18	34	3.5	2.7	6	3	2
No.6-32UNC	2BX	PDUN6JYGEX	4.5P	56	11	19	32	4	3	6	3	2
No.8-32UNC	2BX	PDUN8JYGEX	4.5P	63	13	21	38	4.5	3.4	6	3	2
No.10-24UNC	2BX	PDUNAMYGEX	4.5P	70	14	24	39	6	4.9	8	3	2
No.10-32UNF	2BX	PDUNAJYGEX	4.5P	70	14	24	39	6	4.9	8	3	2
1/4-20UNC	2BX	PDU04NYGEX	4.5P	80	15	30	42	7	5.5	8	3	2
1/4-28UNF	2BX	PDU04KYGEX	4.5P	80	15	30	42	7	5.5	8	3	2
5/16-18UNC	2BX	PDU05OYGEX	4.5P	90	19	35	47	8	6.2	9	3	3
5/16-24UNF	2BX	PMU05MYGEX	4.5P	90	19	-	46	6	4.9	8	3	4
3/8-16UNC	2BX	PDU06PYGEX	4.5P	100	23	39	54.5	9	7	10	3	3
3/8-24UNF	2BX	PMU06MYGEX	4.5P	100	23	-	51	7	5.5	8	3	4
7/16-14UNC	2BX	PGU07QYGEX	4.5P	100	23	-	51	8	6.2	9	3	4
1/2-13UNC	2BX	PGU08RYGEX	4.5P	110	26	-	56	9	7	10	3	4
1/2-20UNF	2BX	PMU08NYGEX	4.5P	100	21	-	51	9	7	10	3	4
9/16-12UNC	2BX	PGU09SYGEX	4.5P	110	26	-	56	11	9	12	3	4
9/16-18UNF	2BX	PMU09OYGEX	4.5P	100	21	-	51	11	9	12	3	4
5/8-11UNC	2BX	PGU10UYGEX	4.5P	110	26	-	56	12	9	12	3	4
5/8-18UNF	2BX	PMU10OYGEX	4.5P	100	21	-	51	12	9	12	3	4
3/4-10UNC	2BX	PGU12VYGEX	4.5P	125	33	-	64	14	11	14	3	4
3/4-16UNF	2BX	PMU12PYGEX	4.5P	110	24	-	56	14	11	14	3	4
7/8-9UNC	2BX	PGU14WYGEX	4.5P	140	33	-	71	18	14.5	17	3	4
7/8-14UNF	2BX	PMU14QYGEX	4.5P	125	24	-	64	18	14.5	17	3	4
1 -8UNC	2BX	PGU16XYGEX	4.5P	160	37	-	82	18	14.5	17	3	4
1 -12UNF	2BX	PMU16SYGEX	4.5P	140	27	-	71	18	14.5	17	3	4
For G Threads												
G 1/8-28	-	PVG0020GEX	4.5P	90	19	-	46	7	5.5	8	3	4
G 1/4-19	-	PVG0040GEX	4.5P	100	21	-	51	11	9	12	3	4
G 3/8-19	-	PVG0060GEX	4.5P	100	21	-	51	12	9	12	3	4
G 1/2-14	-	PVG0080GEX	4.5P	125	24	-	64	16	12	15	3	4
G 3/4-14	-	PVG0120GEX	4.5P	140	27	-	71	20	16	19	4	4
G 1 -11	-	PVG0160GEX	4.5P	160	29	-	82	25	20	23	4	4

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

③-88

③ Spiral Pointed Tap Series for through 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

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

PO-VA

Spiral Pointed Taps for Stainless Steels, Coated



Specification

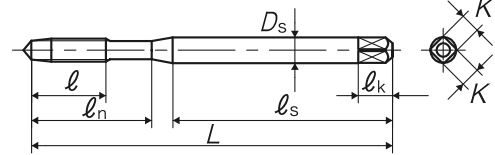


■ Suitable for stainless steels tending to cause work harden and sticky, as well as chrome steels and molybdenum steels. Through hole use.

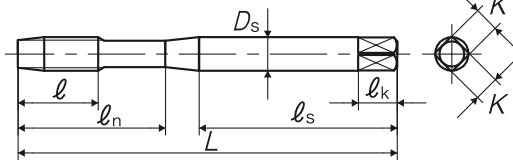
Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 ~15 (m/min)	Medium carbon steels 中炭素鋼 ~15 (m/min)	High carbon steels 高炭素鋼 ~15 (m/min)	Alloy steels 合金鋼 ~15 (m/min)	Stainless steels ステンレス鋼 ~10 (m/min)
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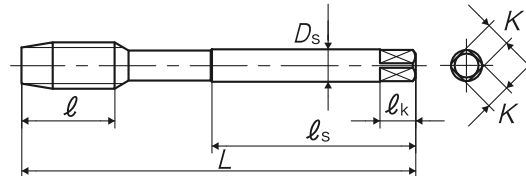
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1F

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	ISO2X	PD3.0GBGET	4.5P	56	9	18	34	3.5	2.7	6	3	1 ▲
M4 × 0.7	ISO2X	PD4.0IBGET	4.5P	63	13	21	38	4.5	3.4	6	3	1 ▲
M5 × 0.8	ISO2X	PD5.0KBGET	4.5P	70	14	25	39	6	4.9	8	3	1 ▲
M6 × 1	ISO2X	PD6.0MBGET	4.5P	80	15	30	45	6	4.9	8	3	1 ▲
M8 × 1.25	ISO2X	PD8.0NBGET	4.5P	90	19	35	47	8	6.2	9	3	2 ▲
M10 × 1.5	ISO2X	PD10.0OBGET	4.5P	100	23	39	52.5	10	8	11	3	2 ▲
M12 × 1.75	ISO2X	PG012PBGET	4.5P	110	26	-	56	9	7	10	3	3 ▲
M14 × 2	ISO2X	PG014QBGET	4.5P	110	26	-	56	11	9	12	3	3 ▲
M16 × 2	ISO2X	PG016QBGET	4.5P	110	26	-	56	12	9	12	3	3 ▲
M20 × 2.5	ISO2X	PG020RBGET	4.5P	140	33	-	71	16	12	15	3	3 ▲

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

DIN

③-89

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	ℓ _t	ℓ	ℓ _n	ℓ _s	D _s	K	ℓ _k

LS-SU-S-PO

Long Shank Short Spiral Pointed Taps for Stainless Steels

Specification

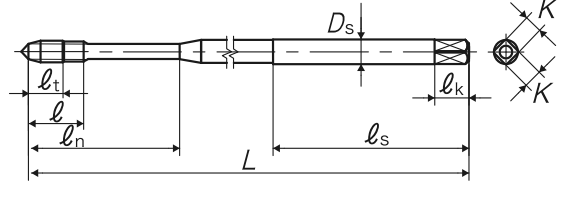


Long shank spiral pointed tap suitable for stainless steels tending to cause work harden and sticky, as well as chrome steels and molybdenum steels. Through hole use. Tapping of rather deep holes is possible.

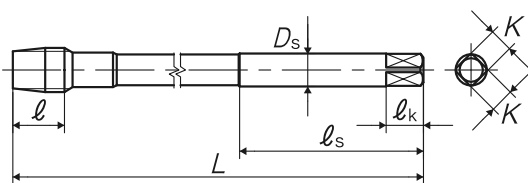
Tapping Speeds depending on Materials

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 (m/min)

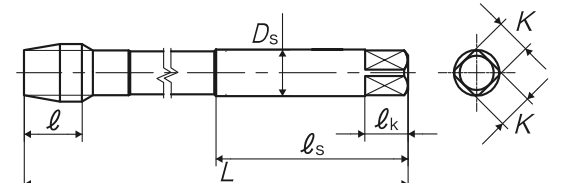
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1E

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	PY3.0QGEXES	4.5P	100	5	9	28	40	4	3.2	6	3	1	¥ 4,750 *
M4 × 0.7	P2	PY4.0IQGEXES	4.5P	100	7	11	31	40	5	4	7	3	1	¥ 4,340 *
M4 × 0.7	P2	PY4.0IQGEXGS	4.5P	150	7	11	31	40	5	4	7	3	1	¥ 8,260 *
M5 × 0.8	P2	PY5.0KQGEXES	4.5P	100	9	13	38	40	5.5	4.5	7	3	1	¥ 3,800 *
M5 × 0.8	P2	PY5.0KQGEXGS	4.5P	150	9	13	38	40	5.5	4.5	7	3	1	¥ 6,420 *
M6 × 1	P2	PY6.0MQGEXES	4.5P	100	11	15	45	40	6	4.5	7	3	1	¥ 3,250 *
M6 × 1	P2	PY6.0MQGEXGS	4.5P	150	11	15	45	40	6	4.5	7	3	1	¥ 5,730 *
M8 × 1.25	P3	PY8.0NRGEXES	5P	100	-	12	-	50	6.2	5	8	3	2	¥ 4,200 *
M8 × 1.25	P3	PY8.0NRGEXGS	5P	150	-	12	-	50	6.2	5	8	3	2	¥ 7,150 *
M10 × 1.5	P3	PY010ORGEXES	5P	100	-	13	-	50	7	5.5	8	3	2	¥ 5,100 *
M10 × 1.5	P3	PY010ORGEXGS	5P	150	-	13	-	50	7	5.5	8	3	2	¥ 8,310 *
M10 × 1.25	P3	PY010NRGEXES	5P	100	-	13	-	50	7	5.5	8	3	2	¥ 5,100 *
M10 × 1.25	P3	PY010NRGEXGS	5P	150	-	13	-	50	7	5.5	8	3	2	¥ 8,310 *
M12 × 1.75	P4	PY012PSGEXES	5P	100	-	15	-	50	8.5	6.5	9	3	2	¥ 6,250 *
M12 × 1.75	P4	PY012PSGEXGS	5P	150	-	15	-	50	8.5	6.5	9	3	2	¥ 10,400 *
M12 × 1.5	P3	PY012ORGEXGS	5P	150	-	15	-	50	8.5	6.5	9	3	2	¥ 10,400 *
M12 × 1.25	P4	PY012NSGEXGS	5P	150	-	15	-	50	8.5	6.5	9	3	2	¥ 10,400 *
M14 × 2	P4	PY014QSGEXGS	5P	150	-	18	-	60	10.5	8	11	3	2	¥ 13,200 *

* = Specified Distribution Items. Made to order products.

③ Spiral Pointed Tap Series for through 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-PO Long Shank Short Spiral Pointed 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	MSRP
M14 × 1.5	P3	PY014ORGEXGS	5P	150	-	14	-	60	10.5	8	11	3	2	¥ 13,200 ※
M16 × 2	P4	PY016QSGEXGS	5P	150	-	18	-	60	12.5	10	13	3	2	¥ 14,200 ※
M16 × 2	P4	PY016QSGEXKS	5P	200	-	18	-	60	12.5	10	13	3	2	¥ 18,700 ※
M16 × 1.5	P3	PY016ORGEXGS	5P	150	-	14	-	60	12.5	10	13	3	2	¥ 14,200 ※
M16 × 1.5	P3	PY016ORGEXKS	5P	200	-	14	-	60	12.5	10	13	3	2	¥ 18,700 ※
M18 × 2.5	P4	PY018RSGEXGS	5P	150	-	20	-	70	14	11	14	3	2	¥ 19,400 ※
M18 × 2.5	P4	PY018RSGEXKS	5P	200	-	20	-	70	14	11	14	3	2	¥ 24,400 ※
M18 × 1.5	P4	PY018OSGEXGS	5P	150	-	14	-	70	14	11	14	3	2	¥ 19,400 ※
M18 × 1.5	P4	PY018OSGEXKS	5P	200	-	14	-	70	14	11	14	3	2	¥ 24,400 ※
M20 × 2.5	P4	PY020RSGEXGS	5P	150	-	20	-	70	15	12	15	3	3	¥ 24,900 ※
M20 × 2.5	P4	PY020RSGEXKS	5P	200	-	20	-	70	15	12	15	3	3	¥ 31,000 ※
M20 × 1.5	P4	PY020OSGEXGS	5P	150	-	14	-	70	15	12	15	3	3	¥ 24,900 ※
M20 × 1.5	P4	PY020OSGEXKS	5P	200	-	14	-	70	15	12	15	3	3	¥ 31,000 ※
M22 × 2.5	P4	PY022RSGEXGS	5P	150	-	20	-	70	17	13	16	3	3	¥ 27,800 ※
M22 × 2.5	P4	PY022RSGEXKS	5P	200	-	20	-	70	17	13	16	3	3	¥ 34,400 ※
M22 × 1.5	P4	PY022OSGEXGS	5P	150	-	14	-	70	17	13	16	3	3	¥ 27,800 ※
M22 × 1.5	P4	PY022OSGEXKS	5P	200	-	14	-	70	17	13	16	3	3	¥ 34,400 ※
M24 × 3	P4	PY024SSGEXGS	5P	150	-	25	-	80	19	15	18	3	3	¥ 32,300 ※
M24 × 3	P4	PY024SSGEXKS	5P	200	-	25	-	80	19	15	18	3	3	¥ 38,700 ※
M24 × 1.5	P4	PY024OSGEXGS	5P	150	-	18	-	80	19	15	18	3	3	¥ 32,300 ※
M24 × 1.5	P4	PY024OSGEXKS	5P	200	-	18	-	80	19	15	18	3	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

③-91

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

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

3

ANSI

ANSI

ZELX SS PO 6"

Long Shank Spiral Pointed Taps for Stainless Steels



Specification

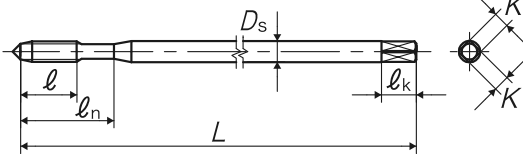


■ Suitable for stainless steels tending to cause work harden and sticky, as well as chrome steels and molybdenum steels. Through hole use.

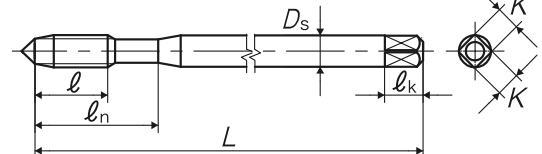
Tapping Speed depending on Materials

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

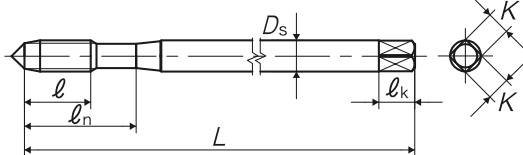
TYPE:1



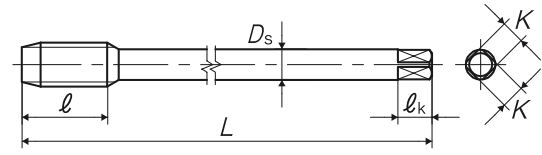
TYPE:2



TYPE:3



TYPE:4



Segment : 1F

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	Y82523	4.5P	6	0.256	0.437	0.141	0.11	0.187	2	1
No.3-48UNC	GH2	Y82500	4.5P	6	0.295	0.5	0.141	0.11	0.187	2	1
No.4-40UNC	GH2	Y82501	4.5P	6	0.335	0.562	0.141	0.11	0.187	2	1
No.6-32UNC	GH3	Y82505	4.5P	6	0.413	0.687	0.141	0.11	0.187	3	1
No.8-32UNC	GH3	Y82507	4.5P	6	0.453	0.75	0.168	0.131	0.25	3	1
No.10-24UNC	GH3	Y82509	4.5P	6	0.531	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH3	Y82510	4.5P	6	0.531	0.875	0.194	0.152	0.25	3	1
1/4-20UNC	GH3	Y82513	4.5P	6	0.591	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	Y82514	4.5P	6	0.591	1	0.255	0.191	0.312	3	2
5/16-18UNC	GH3	Y82515	4.5P	6	0.669	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	Y82516	4.5P	6	0.669	1.125	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	Y82517	4.5P	6	0.748	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	Y82518	4.5P	6	0.748	1.25	0.381	0.286	0.437	3	3
7/16-14UNC	GH3	Y82519	4.5P	6	0.866	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH3	Y82520	4.5P	6	0.866	-	0.323	0.242	0.406	3	4
1/2-13UNC	GH3	Y82521	4.5P	6	0.984	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	Y82522	4.5P	6	0.984	-	0.367	0.275	0.437	3	4

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

③-92

③ Spiral Pointed Tap Series for through 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

JIS

③-93



S-PO

Short Spiral Pointed Taps for Deep Hole Use



Specification

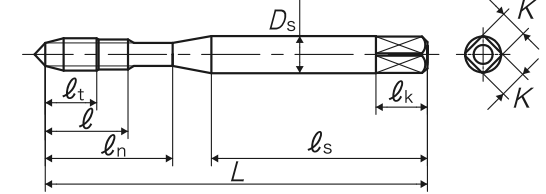


■S-PO is the spiral pointed tap having short thread portion which reduces friction and makes smooth coolant supply, and is suitable for such deep holes which are deeper than 2.5 times of the nominal dia.

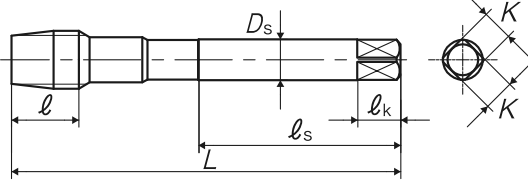
Tapping Speeds depending on Materials

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)

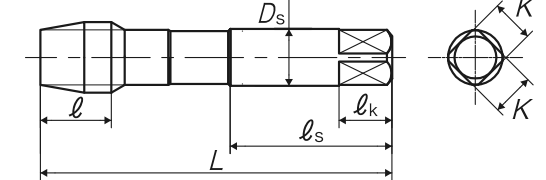
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1E

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														
M2 × 0.4	P2	PSMQ2.0E	5P	42	4	7.2	12	27	3	2.5	5	2	1	¥ 3,260
M2 × 0.4	P3	PSMR2.0E	5P	42	4	7.2	12	27	3	2.5	5	2	1	¥ 3,260 ※
M2.3 × 0.4	P2	PSMQ2.3E	5P	42	4	7.2	12	27	3	2.5	5	2	1	¥ 2,970 ※
M2.5 × 0.45	P2	PSMQ2.5F	5P	46	4	8.1	14	29	3	2.5	5	2	1	¥ 2,490 ※
M2.6 × 0.45	P2	PSMQ2.6F	5P	46	4	8.1	14	29	3	2.5	5	2	1	¥ 2,490 ※
M2.6 × 0.45	P3	PSMR2.6F	5P	46	4	8.1	14	29	3	2.5	5	2	1	¥ 2,490 ※
M3 × 0.5	P2	PSMQ3.0G	5P	46	5	9	14	26	4	3.2	6	3	1	¥ 1,740
M3 × 0.5	P3	PSMR3.0G	5P	46	5	9	14	26	4	3.2	6	3	1	¥ 1,740 ※
3M0.6	P2	PSMQ3.0H	5P	46	5	9	14	26	4	3.2	6	3	1	¥ 1,740 ※
M3.5 × 0.6	P2	PSMQ3.5H	5P	52	7	11	16	29	5	4	7	3	1	¥ 1,740 ※
M4 × 0.7	P2	PSMQ4.0I	5P	52	7	11	17	29	5	4	7	3	1	¥ 1,740
M4 × 0.7	P3	PSMR4.0I	5P	52	7	11	17	29	5	4	7	3	1	¥ 1,740 ※
M4 × 0.7	P4	PSMS4.0I	5P	52	7	11	17	29	5	4	7	3	1	¥ 1,740 ※
4M0.75	P2	PSMQ4.0J	5P	52	7	11	17	29	5	4	7	3	1	¥ 1,740 ※
M5 × 0.8	P2	PSMQ5.0K	5P	60	9	13	22	33	5.5	4.5	7	3	1	¥ 1,770
M5 × 0.8	P3	PSMR5.0K	5P	60	9	13	22	33	5.5	4.5	7	3	1	¥ 1,770 ※
M5 × 0.8	P4	PSMS5.0K	5P	60	9	13	22	33	5.5	4.5	7	3	1	¥ 1,770 ※

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

3

JIS

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
5M0.9	P2	PSMQ5.0L	5P	60	9	13	22	33	5.5	4.5	7	3	1	¥ 1,770 ※
M6 × 1	P2	PSMQ6.0M	5P	62	11	15	26	33	6	4.5	7	3	1	¥ 1,940
M6 × 1	P3	PSMR6.0M	5P	62	11	15	26	33	6	4.5	7	3	1	¥ 1,940 ※
M6 × 1	P4	PSMS6.0M	5P	62	11	15	26	33	6	4.5	7	3	1	¥ 1,940 ※
M8 × 1.25	P3	PSMR8.0N	5P	70	-	12	-	36	6.2	5	8	3	2	¥ 2,660
M8 × 1.25	P4	PSMS8.0N	5P	70	-	12	-	36	6.2	5	8	3	2	¥ 2,660 ※
M8 × 1	P3	PSMR8.0M	5P	70	-	12	-	36	6.2	5	8	3	2	¥ 3,020 ※
M10 × 1.5	P3	PSMR010O	5P	75	-	13	-	38	7	5.5	8	3	2	¥ 3,380
M10 × 1.5	P4	PSMS010O	5P	75	-	13	-	38	7	5.5	8	3	2	¥ 3,380 ※
M10 × 1.25	P3	PSMR010N	5P	75	-	13	-	38	7	5.5	8	3	2	¥ 3,380 ※
M10 × 1.25	P4	PSMS010N	5P	75	-	13	-	38	7	5.5	8	3	2	¥ 3,380 ※
M10 × 1	P3	PSMR010M	5P	75	-	13	-	38	7	5.5	8	3	2	¥ 4,010
M12 × 1.75	P4	PSMS012P	5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 4,780
M12 × 1.75	P5	PSMT012P	5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 4,780 ※
M12 × 1.5	P3	PSMR012O	5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 4,780 ※
M12 × 1.5	P5	PSMT012O	5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 4,780 ※
M12 × 1.25	P4	PSMS012N	5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 4,780
M12 × 1.25	P5	PSMT012N	5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 4,780 ※
M12 × 1	P3	PSMR012M	5P	82	-	15	-	42	8.5	6.5	9	3	2	¥ 5,630 ※
M14 × 2	P4	PSMS014Q	5P	88	-	18	-	45	10.5	8	11	3	2	¥ 6,520
M14 × 2	P5	PSMT014Q	5P	88	-	18	-	45	10.5	8	11	3	2	¥ 6,520 ※
M14 × 1.5	P3	PSMR014O	5P	88	-	14	-	45	10.5	8	11	3	2	¥ 6,520
M14 × 1.5	P5	PSMT014O	5P	88	-	14	-	45	10.5	8	11	3	2	¥ 6,520 ※
M16 × 2	P4	PSMS016Q	5P	95	-	18	-	48	12.5	10	13	3	2	¥ 8,720
M16 × 2	P5	PSMT016Q	5P	95	-	18	-	48	12.5	10	13	3	2	¥ 8,720 ※
M16 × 1.5	P3	PSMR016O	5P	95	-	14	-	48	12.5	10	13	3	2	¥ 8,720 ※
M16 × 1.5	P5	PSMT016O	5P	95	-	14	-	48	12.5	10	13	3	2	¥ 8,720 ※
M18 × 2.5	P4	PSMS018R	5P	100	-	20	-	51	14	11	14	3	2	¥ 11,700 ※
M18 × 2.5	P5	PSMT018R	5P	100	-	20	-	51	14	11	14	3	2	¥ 11,700 ※
M18 × 1.5	P4	PSMS018O	5P	100	-	14	-	51	14	11	14	3	2	¥ 11,700 ※
M18 × 1.5	P5	PSMT018O	5P	100	-	14	-	51	14	11	14	3	2	¥ 11,700 ※
M20 × 2.5	P4	PSMS020R	5P	105	-	20	-	50	15	12	15	3	3	¥ 16,000
M20 × 2.5	P5	PSMT020R	5P	105	-	20	-	50	15	12	15	3	3	¥ 16,000 ※
M20 × 1.5	P4	PSMS020O	5P	105	-	14	-	50	15	12	15	3	3	¥ 16,000 ※
M20 × 1.5	P5	PSMT020O	5P	105	-	14	-	50	15	12	15	3	3	¥ 16,000 ※
M22 × 2.5	P4	PSMS022R	5P	115	-	20	-	55	17	13	16	3	3	¥ 20,400 ※
M22 × 1.5	P4	PSMS022O	5P	115	-	14	-	55	17	13	16	3	3	¥ 20,400 ※
M24 × 3	P4	PSMS024S	5P	120	-	25	-	55	19	15	18	3	3	¥ 25,400 ※
M24 × 1.5	P4	PSMS024O	5P	120	-	18	-	55	19	15	18	3	3	¥ 25,400 ※
M27 × 3	P4	PSMS027S	5P	130	-	25	-	60	20	15	18	4	3	¥ 35,300 ※
M27 × 1.5	P4	PSMS027O	5P	130	-	20	-	60	20	15	18	4	3	¥ 35,300 ※
M30 × 3.5	P5	PSMT030T	5P	135	-	30	-	62	23	17	20	4	3	¥ 44,900 ※
M30 × 1.5	P4	PSMS030O	5P	135	-	20	-	62	23	17	20	4	3	¥ 44,900 ※
M33 × 3.5	P5	PSMT033T	5P	145	-	30	-	67	25	19	22	4	3	¥ 52,200 ※
M36 × 4	P5	PSMT036U	5P	155	-	40	-	71	28	21	24	4	3	¥ 60,500 ※
M39 × 4	P5	PSMT039U	5P	165	-	40	-	76	30	23	26	4	3	¥ 69,400 ※
M42 × 4.5	P5	PSMT042V	5P	175	-	40	-	81	32	26	30	4	3	¥ 84,400 ※

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

③-94

※ = Specified Distribution Items. Made to order products.

 Think threads with
YAMAWA

③ Spiral Pointed Tap Series for through 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

③-95



HC+PO HC-PO

Spiral Pointed Taps for High Carbon Steels

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)

Thermal refined steels
調質鋼
5~10
(m/min)
25~35HRC



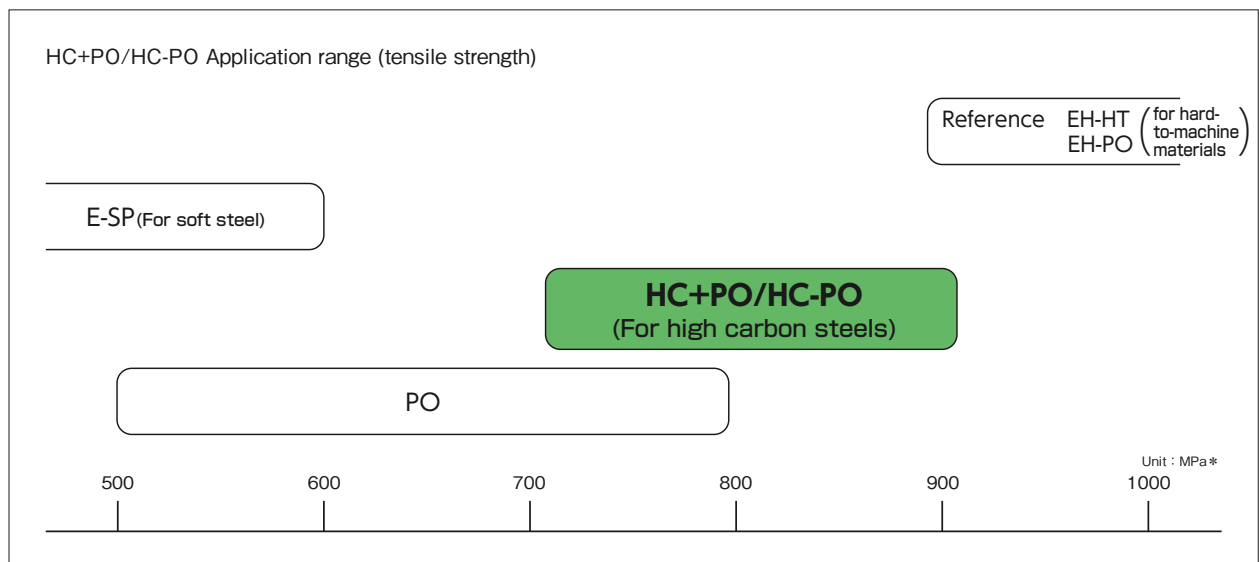
• Product Name and Size.

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

Product Features

- The HC+PO/HC-PO is a spiral pointed tap suitable for the tapping medium and high hardness workpiece materials up to 35 HRC in high carbon steel such as S55C.

Product system chart (tensile strength)



* 1MPa=1N/mm² ≒ 1Kgf/mm² ÷ 9.8

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

3

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

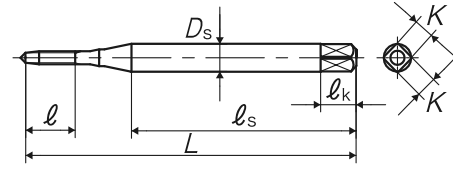
Precision Machinery/
Medical Surgical Instruments

⑫

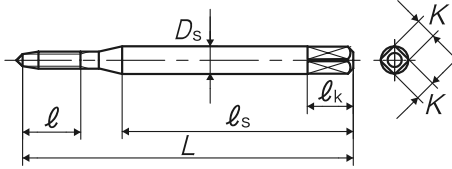
JIS

③-96

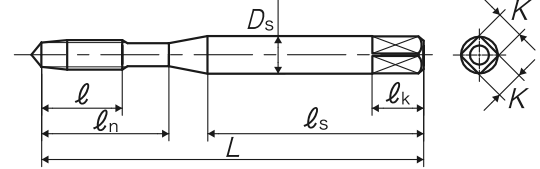
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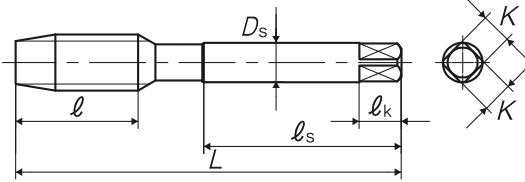
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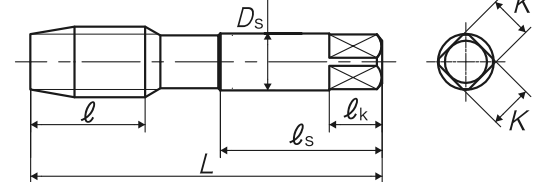
TYPE: 3



TYPE: 4



TYPE: 5



HC+PO Spiral Pointed Taps for High Carbon Steels

Segment : 1E

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													
M1.4 × 0.3	P1	PCPP1.4C	5P	36	5.4	-	24	3	2.5	5	2	1	¥ 3,700
M1.6 × 0.35	P2	PCPQ1.6D	5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,530
M1.7 × 0.35	P2	PCPQ1.7D	5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,530
M2 × 0.4	P2	PCPQ2.0E	5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,820
M2.5 × 0.45	P2	PCPQ2.5F	5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,160
M2.6 × 0.45	P2	PCPQ2.6F	5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,160

HC-PO Spiral Pointed Taps for High Carbon Steels

Segment : 1E

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	PCMQ3.0G	5P	46	9	14	26	4	3.2	6	3	3	¥ 1,520
M4 × 0.7	P2	PCMQ4.0I	5P	52	11	17	29	5	4	7	3	3	¥ 1,520
M5 × 0.8	P2	PCMQ5.0K	5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,530
M6 × 1	P2	PCMQ6.0M	5P	62	15	26	33	6	4.5	7	3	3	¥ 1,680
M8 × 1.25	P3	PCMR8.0N	5P	70	19	-	36	6.2	5	8	3	4	¥ 2,310
M10 × 1.5	P3	PCMR010O	5P	75	23	-	38	7	5.5	8	3	4	¥ 2,930
M10 × 1.25	P3	PCMR010N	5P	75	23	-	38	7	5.5	8	3	4	¥ 2,930 *
M12 × 1.75	P4	PCMS012P	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,160
M12 × 1.5	P3	PCMR012O	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,160 *
M12 × 1.25	P4	PCMS012N	5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,160 *
M14 × 2	P4	PCMS014Q	5P	88	26	-	45	10.5	8	11	3	4	¥ 5,670 *
M14 × 1.5	P3	PCMR014O	5P	88	26	-	45	10.5	8	11	3	4	¥ 5,670 *

* = Specified Distribution Items. Made to order products.

 Think threads with
YAMAWA

③ Spiral Pointed Tap Series for through 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-PO Spiral Pointed Taps for High Carbon Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M16 × 2	P4	PCMS016Q	5P	95	26	-	48	12.5	10	13	3	4	¥ 7,580 ※
M16 × 1.5	P3	PCMR016O	5P	95	26	-	48	12.5	10	13	3	4	¥ 7,580 ※
M18 × 2.5	P4	PCMS018R	5P	100	33	-	51	14	11	14	3	4	¥ 10,200 ※
M18 × 1.5	P4	PCMS018O	5P	100	33	-	51	14	11	14	3	4	¥ 10,200 ※
M20 × 2.5	P4	PCMS020R	5P	105	33	-	50	15	12	15	3	5	¥ 13,800 ※
M20 × 1.5	P4	PCMS020O	5P	105	33	-	50	15	12	15	3	5	¥ 13,800 ※
M22 × 2.5	P4	PCMS022R	5P	115	33	-	55	17	13	16	3	5	¥ 17,700 ※
M24 × 3	P4	PCMS024S	5P	120	39	-	55	19	15	18	3	5	¥ 22,000 ※

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 Pointed Tap Series for through 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

3

JIS

HC-PO OX



Oxidized Spiral Pointed Taps for High Carbon Steels

Specification



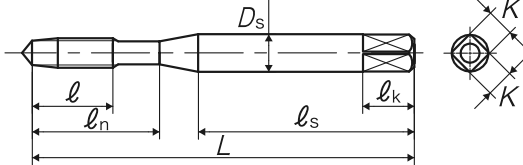
■ The HC-PO OX is a spiral pointed tap suitable for tapping high carbon steel such as S55C.

Tapping Speeds depending on Materials

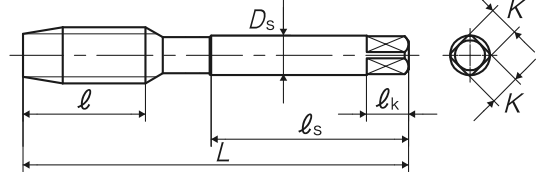
Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Thermal refined steels 調質鋼
5~10 (m/min)	5~10 (m/min)	5~10 (m/min)

25~35HRC

TYPE: 1



TYPE: 2



Segment: 1E

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	PCMQ6.0MX	5P	62	15	26	33	6	4.5	7	3	1	¥ 1,850
M8 × 1.25	P3	PCMR8.0NX	5P	70	19	-	36	6.2	5	8	3	2	¥ 2,550
M8 × 1	P3	PCMR8.0MX	5P	70	19	-	36	6.2	5	8	3	2	¥ 2,880 ※

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

③-98

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

③ Spiral Pointed Tap Series for through hole

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

Spiral Pointed Taps for Aluminum



Specification

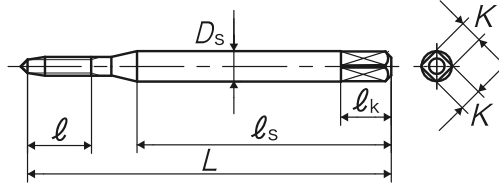


■ In tapping of aluminum die casting and aluminum casting, AL-PO solves chip jamming and chip clogging trouble, and eliminates torn threads.

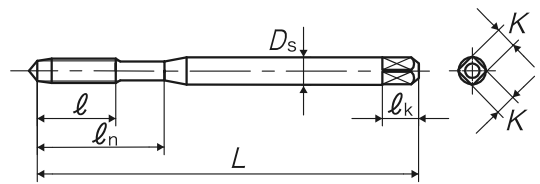
Tapping Speed depending on Materials

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 マグネシウム合金鋳物	Zinc alloy castings 亜鉛合金鑄物
5~15 (m/min)	5~15 (m/min)	5~15 (m/min)	5~15 (m/min)	5~15 (m/min)	5~15 (m/min)	5~15 (m/min)

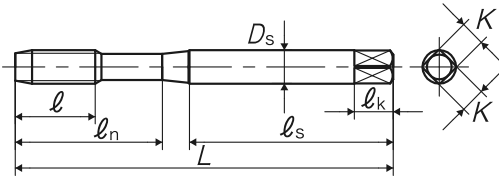
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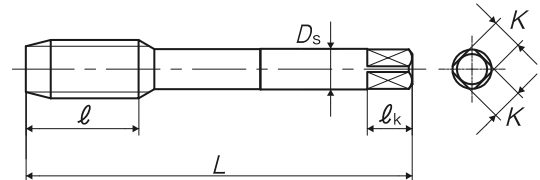
TYPE:2



TYPE:3



TYPE:4



Segment : 1F

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ _n (inch)	D _s (inch)	K (inch)	ℓ _k (inch)	No. of flutes	TYPE
For Metric Threads											
M3 × 0.5	D3	386228M	5P	2.205	0.433	0.736	0.141	0.11	0.187	3	2
M3.5 × 0.6	D4	386229M	5P	2.205	0.433	0.748	0.141	0.11	0.187	3	2
M4 × 0.7	D4	386230M	5P	2.48	0.512	0.815	0.168	0.131	0.25	3	2
M5 × 0.8	D4	386231M	5P	2.756	0.551	0.984	0.194	0.152	0.25	3	2
M6 × 1	D5	386232M	5P	3.15	0.591	1.181	0.255	0.191	0.312	3	2
M7 × 1	D5	386233M	5P	3.543	0.748	1.339	0.318	0.238	0.375	3	3
M8 × 1.25	D5	386235M	5P	3.543	0.748	1.378	0.318	0.238	0.375	3	3
M8 × 1	D5	386234M	5P	3.543	0.748	1.378	0.318	0.238	0.375	3	3
M10 × 1.5	D6	386237M	5P	3.937	0.906	1.535	0.381	0.286	0.437	3	3
M10 × 1.25	D5	386236M	5P	3.937	0.906	1.535	0.381	0.286	0.437	3	3
M12 × 1.75	D6	386240M	5P	4.331	1.024	-	0.367	0.275	0.437	3	4
M12 × 1.5	D5	386239M	5P	4.331	1.024	-	0.367	0.275	0.437	3	4
M12 × 1.25	D5	386238M	5P	4.331	1.024	-	0.367	0.275	0.437	3	4
For Unified Threads											
No.2-56UNC	GH2	386200M	5P	1.772	0.314	-	0.141	0.11	0.187	2	1
No.4-40UNC	GH2	386201M	5P	2.205	0.354	0.709	0.141	0.11	0.187	2	2
No.5-40UNC	GH2	386202M	5P	2.205	0.433	0.736	0.141	0.11	0.187	3	2

ANSI

③-99

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

3

ANSI

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
No.6-32UNC	GH3	386203M	5P	2.205	0.433	0.748	0.141	0.11	0.187	3	2
No.8-32UNC	GH3	386204M	5P	2.48	0.512	0.827	0.168	0.131	0.25	3	2
No.10-24UNC	GH3	386205M	5P	2.756	0.551	0.945	0.194	0.152	0.25	3	2
No.10-32UNF	GH3	386206M	5P	2.756	0.551	0.945	0.194	0.152	0.25	3	2
1/4-20UNC	GH3	386207M	5P	3.15	0.591	1.181	0.255	0.191	0.312	3	2
1/4-20UNC	GH5	386208M	5P	3.15	0.591	1.181	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	386209M	5P	3.15	0.591	1.181	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	386211M	5P	3.15	0.591	1.181	0.255	0.191	0.312	3	2
5/16-18UNC	GH3	386212M	5P	3.543	0.748	1.378	0.318	0.238	0.375	3	3
5/16-18UNC	GH5	386213M	5P	3.543	0.748	1.378	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	386214M	5P	3.543	0.748	1.378	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	386215M	5P	3.543	0.748	1.378	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	386216M	5P	3.937	0.906	1.535	0.381	0.286	0.437	3	3
3/8-16UNC	GH5	386217M	5P	3.937	0.906	1.535	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	386218M	5P	3.937	0.906	1.535	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	386219M	5P	3.937	0.906	1.535	0.381	0.286	0.437	3	3
7/16-14UNC	GH3	386220M	5P	3.937	0.906	-	0.323	0.242	0.406	3	4
7/16-14UNC	GH5	386221M	5P	3.937	0.906	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH3	386222M	5P	3.937	0.906	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH5	386223M	5P	3.937	0.906	-	0.323	0.242	0.406	3	4
1/2-13UNC	GH3	386224M	5P	4.331	1.024	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH5	386225M	5P	4.331	1.024	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	386226M	5P	4.331	1.024	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH5	386227M	5P	4.331	1.024	-	0.367	0.275	0.437	3	4

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

③-100

③ Spiral Pointed Tap Series for through 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

JIS

EH-PO

Spiral Pointed Taps for Hard-to-Machine Materials



Specification



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)	5~10 (m/min)	~5 (m/min)
	25~35HRC	35~45HRC

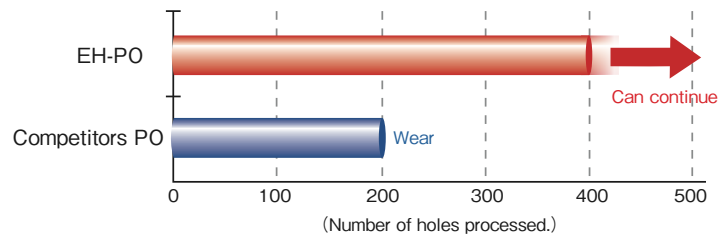
Product Features

- The EH-PO taps are suitable for high hardness materials from 30 to 45 HRC in high carbon steel, alloy steel forging, tempering material and mold materials.
- Tool life is greatly improved using a cutting edge shape suitable for difficult to machine materials. The tap exhibits excellent wear resistance.
- For through hole applications.

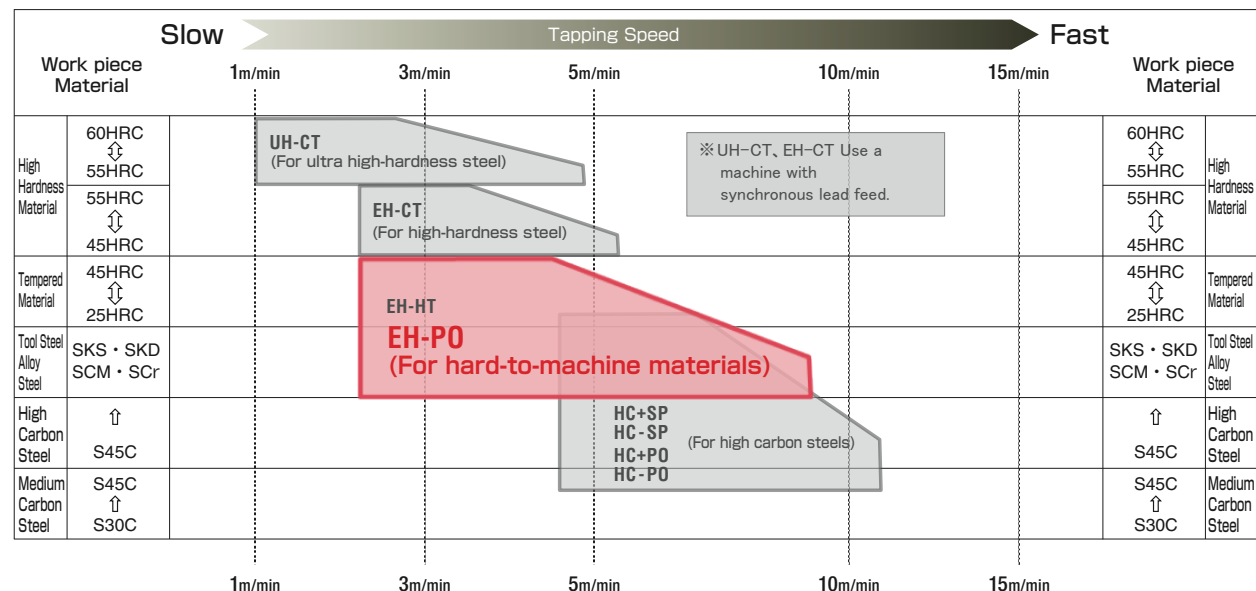
Tapping Data

Processing conditions [M10×1.25 P4]

Workpiece Material	S55C/A hub
Bored Hole Size	φ8.8
Tapping Length	11mm (Through hole)
Tapping Speed	10m/min
Machinery Type	Vertical machining center (asynchronous)
Holder	With tension
Tapping Fluid	Water soluble cutting fluid



Recommendation chart



Processing range chart.

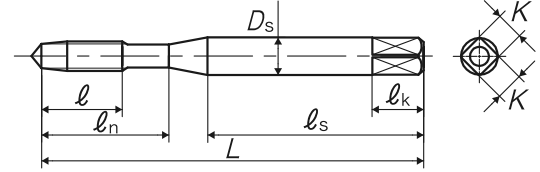
JIS

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

3

JIS

TYPE: 1

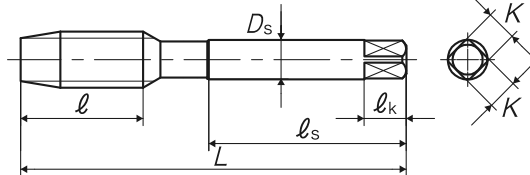
Spiral Fluted Taps
(for blind hole)

①

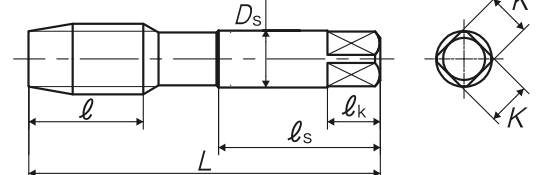
Spiral Fluted Taps
(for through hole)

②

TYPE: 2



TYPE: 3

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Segment : 1F

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	EPHMR3.0G	4.5P	46	9	14	26	4	3.2	6	3	1	¥ 2,020
M4 × 0.7	P3	EPHMR4.0I	4.5P	52	11	17	29	5	4	7	3	1	¥ 2,020
M5 × 0.8	P3	EPHMR5.0K	4.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 2,030
M6 × 1	P3	EPHMR6.0M	4.5P	62	15	26	33	6	4.5	7	3	1	¥ 2,240
M8 × 1.25	P4	EPHMS8.0N	4.5P	70	19	-	36	6.2	5	8	3	2	¥ 3,130
M10 × 1.5	P4	EPHMS010O	4.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,970
M10 × 1.25	P4	EPHMS010N	4.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,970
M12 × 1.75	P4	EPHMS012P	4.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,630
M12 × 1.5	P4	EPHMS012O	4.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,630 ※
M12 × 1.25	P4	EPHMS012N	4.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,630 ※
M14 × 2	P5	EPHMT014Q	4.5P	88	26	-	45	10.5	8	11	3	2	¥ 7,670 ※
M14 × 1.5	P4	EPHMS014O	4.5P	88	26	-	45	10.5	8	11	3	2	¥ 7,670
M16 × 2	P5	EPHMT016Q	4.5P	95	26	-	48	12.5	10	13	3	2	¥ 10,300
M16 × 1.5	P4	EPHMS016O	4.5P	95	26	-	48	12.5	10	13	3	2	¥ 10,300 ※
M18 × 2.5	P5	EPHMT018R	4.5P	100	33	-	51	14	11	14	3	2	¥ 13,900 ※
M18 × 1.5	P4	EPHMS018O	4.5P	100	33	-	51	14	11	14	3	2	¥ 13,900 ※
M20 × 2.5	P5	EPHMT020R	4.5P	105	33	-	50	15	12	15	3	3	¥ 18,700 ※
M20 × 1.5	P4	EPHMS020O	4.5P	105	33	-	50	15	12	15	3	3	¥ 18,700 ※
M22 × 2.5	P5	EPHMT022R	4.5P	115	33	-	55	17	13	16	3	3	¥ 23,900 ※
M22 × 1.5	P4	EPHMS022O	4.5P	115	33	-	55	17	13	16	3	3	¥ 23,900 ※
M24 × 3	P5	EPHMT024S	4.5P	120	39	-	55	19	15	18	3	3	¥ 29,900 ※
M24 × 1.5	P4	EPHMS024O	4.5P	120	39	-	55	19	15	18	3	3	¥ 29,900 ※

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

③-102

※ = Specified Distribution Items. Made to order products.

 Think threads with
YAMAWA

③ Spiral Pointed Tap Series for through 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

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

EH-PO

Spiral Pointed Taps for Hard-to-Machine Materials



Specification

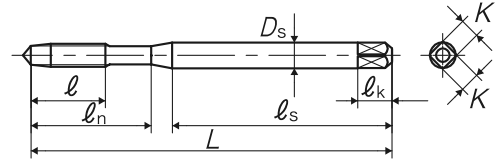


Tapping Speeds depending on Materials

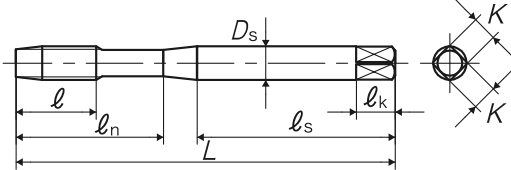
High carbon steels 高炭素鋼	Thermal refined steels 調質鋼	Thermal refined steels 調質鋼
5~10 (m/min)	5~10 (m/min)	~5 (m/min)
	25~35HRC	35~45HRC

■ Spiral pointed tap suitable for high hardness steels of 30 ~ 45HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and die steels. Through hole use.

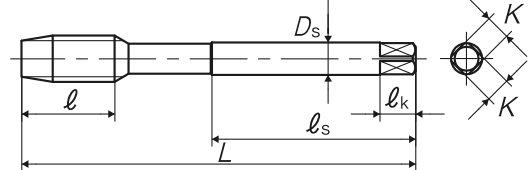
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1F

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	ISO2X	PD3.0GBDCB	4.5P	56	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2X	PD4.0IBDCB	4.5P	63	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2X	PD5.0KBDCB	4.5P	70	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2X	PD6.0MBDCB	4.5P	80	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	PD8.0NBDCB	4.5P	90	19	35	47	8	6.2	9	3	2
M8 × 1	ISO2X	PM8.0MBDCB	4.5P	90	19	-	46	6	4.9	8	3	3
M10 × 1.5	ISO2X	PD010OBDCB	4.5P	100	23	39	52.5	10	8	11	3	2
M10 × 1.25	ISO2X	PM010NBDCB	4.5P	100	23	-	51	7	5.5	8	3	3
M10 × 1	ISO2X	PM010MBDCB	4.5P	90	19	-	46	7	5.5	8	3	3
M12 × 1.75	ISO2X	PG012PBDCB	4.5P	110	26	-	56	9	7	10	3	3
M12 × 1.5	ISO2X	PM012OBDCB	4.5P	100	21	-	51	9	7	10	3	3
M12 × 1.25	ISO2X	PM012NBDCB	4.5P	100	21	-	51	9	7	10	3	3
M14 × 2	ISO2X	PG014QBDCB	4.5P	110	26	-	56	11	9	12	3	3
M14 × 1.5	ISO2X	PM014OBDCB	4.5P	100	21	-	51	11	9	12	3	3
M16 × 2	ISO2X	PG016QBDCB	4.5P	110	26	-	56	12	9	12	3	3
M16 × 1.5	ISO2X	PM016OBDCB	4.5P	100	21	-	51	12	9	12	3	3
M18 × 2.5	ISO2X	PG018RBDCB	4.5P	125	33	-	64	14	11	14	3	3
M18 × 1.5	ISO2X	PM018OBDCB	4.5P	110	24	-	56	14	11	14	3	3
M20 × 2.5	ISO2X	PG020RBDCB	4.5P	140	33	-	71	16	12	15	3	3
M20 × 1.5	ISO2X	PM020OBDCB	4.5P	125	24	-	64	16	12	15	3	3
M22 × 2.5	ISO2X	PG022RBDCB	4.5P	140	33	-	71	18	14.5	17	3	3
M24 × 3	ISO2X	PG024SBDCB	4.5P	160	37	-	82	18	14.5	17	3	3

DIN

MEMO

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

③ Spiral Pointed Tap Series for through 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

③-105

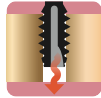


ZEN-P

Spiral Pointed Taps for Nickel Base Alloys



Specification



Tapping Speeds depending on Materials



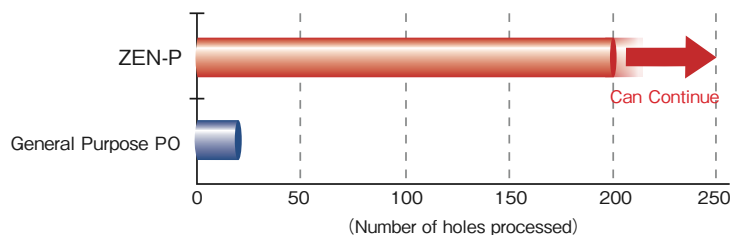
Product Features

- The tap is produced from high grade powder high speed steel material that has excellent heat resistance and abrasion resistance properties.
- Cutting edge geometry is designed to accommodate for thread shrinkage and the high temperature of difficult to machine materials.
- Utilizes the appropriate flute shape and rake angles for nickel base alloy to allow a smooth discharge of chips.
- YAMAWA uses the ideal surface treatment to prevent chip welding and abrasion.
- Compensating for diameter shrinkage of the internal screw thread, the tap is produced moderately oversize.

Tapping Data

Tapping Condition [M6×1]

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



Characteristics of nickel base alloys.

- Nickel based alloys have much better corrosion resistance 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 problems tapping nickel based alloys.

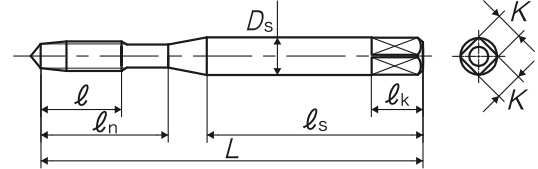
- Nickel based alloys have a high temperature strength and thermal diffusion is small. Abrasion occurs quickly on the taps cutting edge.
- The internal thread diameters tend to spring back and may cause shrinkage and the tap may be crimped causing breakage.
- The material causes chip welding on the cutting chamfer and the flank surface of the tap's threads. The finished surface of the internal screw thread produced from nickel based alloys can become rough and coarse.

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

3

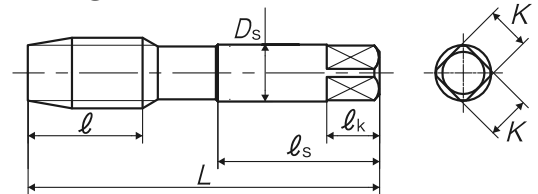
JIS

TYPE: 1

Spiral Fluted Taps
(for blind hole)

①

TYPE: 3

Spiral Fluted Taps
(for through hole)

②

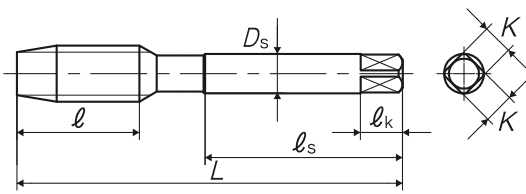
Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

TYPE: 2



Segment : 1F

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	ZENPMR3.0G	4.5P	46	9	14	26	4	3.2	6	3	1	¥ 2,880
M4 × 0.7	P3	ZENPMR4.0I	4.5P	52	11	17	29	5	4	7	3	1	¥ 2,880
M5 × 0.8	P3	ZENPMR5.0K	4.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 2,900
M6 × 1	P3	ZENPMR6.0M	4.5P	62	15	26	33	6	4.5	7	3	1	¥ 3,200
M8 × 1.25	P4	ZENPMS8.0N	4.5P	70	19	-	36	6.2	5	8	3	2	¥ 4,460
M10 × 1.5	P4	ZENPMS010O	4.5P	75	23	-	38	7	5.5	8	3	2	¥ 5,670
M10 × 1.25	P4	ZENPMS010N	4.5P	75	23	-	38	7	5.5	8	3	2	¥ 5,670 *
M12 × 1.75	P5	ZENPMT012P	4.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 8,030
M12 × 1.5	P4	ZENPMS012O	4.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 8,030 *
M12 × 1.25	P5	ZENPMT012N	4.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 8,030 *
M14 × 2	P5	ZENPMT014Q	4.5P	88	26	-	45	10.5	8	11	3	2	¥ 11,000 *
M14 × 1.5	P4	ZENPMS014O	4.5P	88	26	-	45	10.5	8	11	3	2	¥ 11,000 *
M16 × 2	P5	ZENPMT016Q	4.5P	95	26	-	48	12.5	10	13	3	2	¥ 14,800 *
M16 × 1.5	P4	ZENPMS016O	4.5P	95	26	-	48	12.5	10	13	3	2	¥ 14,800 *
M18 × 2.5	P5	ZENPMT018R	4.5P	100	33	-	51	14	11	14	3	2	¥ 19,700 *
M18 × 1.5	P5	ZENPMT018O	4.5P	100	33	-	51	14	11	14	3	2	¥ 19,700 *
M20 × 2.5	P5	ZENPMT020R	4.5P	105	33	-	50	15	12	15	3	3	¥ 26,700 *
M20 × 1.5	P5	ZENPMT020O	4.5P	105	33	-	50	15	12	15	3	3	¥ 26,700 *
For Unified Threads													
No.4-40UNC	P3	ZENPMRUN4H	4.5P	46	9	14	25	4	3.2	6	2	1	¥ 3,630 *
No.6-32UNC	P3	ZENPMRUN6J	4.5P	52	11	17	27	5	4	7	3	1	¥ 3,380 *
No.8-32UNC	P3	ZENPMRUN8J	4.5P	60	13	22	31	5.5	4.5	7	3	1	¥ 3,400 *
No.10-24UNC	P3	ZENPMRUNAM	4.5P	60	13	22	32	5.5	4.5	7	3	1	¥ 3,400 *
No.10-32UNF	P3	ZENPMRUNAJ	4.5P	60	13	22	32	5.5	4.5	7	3	1	¥ 3,400 *
1/4-20UNC	P3	ZENPMRU04N	4.5P	62	15	26	33	6	4.5	7	3	1	¥ 3,650 *
1/4-28UNF	P3	ZENPMRU04K	4.5P	62	15	26	33	6	4.5	7	3	1	¥ 3,650 *
5/16-18UNC	P4	ZENPMSU05O	4.5P	70	19	-	36	6.2	5	8	3	2	¥ 5,130 *
5/16-24UNF	P4	ZENPMSU05M	4.5P	70	19	-	36	6.2	5	8	3	2	¥ 5,130 *
3/8-16UNC	P4	ZENPMSU06P	4.5P	75	23	-	38	7	5.5	8	3	2	¥ 6,570 *
3/8-24UNF	P4	ZENPMSU06M	4.5P	75	23	-	38	7	5.5	8	3	2	¥ 6,570 *
7/16-14UNC	P4	ZENPMSU07Q	4.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 9,260 *
7/16-20UNF	P4	ZENPMSU07N	4.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 9,260 *
1/2-13UNC	P5	ZENPMTU08R	4.5P	88	26	-	45	10.5	8	11	3	2	¥ 9,820 *

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

③-106

※ = Specified Distribution Items. Made to order products.

 Think threads with
YAMAWA

③ Spiral Pointed Tap Series for through 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

ZEN-P Spiral Pointed 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
1/2-20UNF	P4	ZENPMSU08N	4.5P	88	26	-	45	10.5	8	11	3	2	¥ 9,820 ※
5/8-11UNC	P5	ZENPMTU10U	4.5P	95	26	-	48	12.5	10	13	3	2	¥ 14,800 ※
5/8-18UNF	P4	ZENPMSU10O	4.5P	95	26	-	48	12.5	10	13	3	2	¥ 14,800 ※
3/4-10UNC	P5	ZENPMTU12V	4.5P	105	33	-	50	15	12	15	3	3	¥ 26,700 ※
3/4-16UNF	P5	ZENPMTU12P	4.5P	105	33	-	50	15	12	15	3	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

③-107

 Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

M E M O

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

③ Spiral Pointed Tap Series for through hole

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

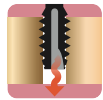
ANSI

ZELX NI PO

Spiral Pointed Taps for Nickel Base Alloys



Specification



■ ZELX NI PO is the spiral pointed 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

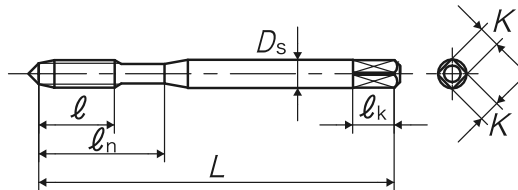
Low carbon steels
低炭素鋼
5~10
(m/min)

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

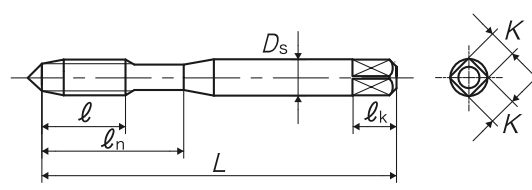
Stainless steels
ステンレス鋼
5~10
(m/min)

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

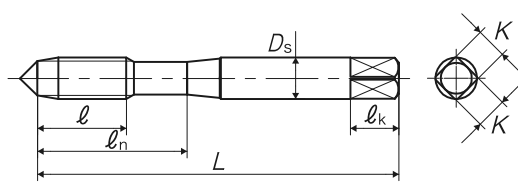
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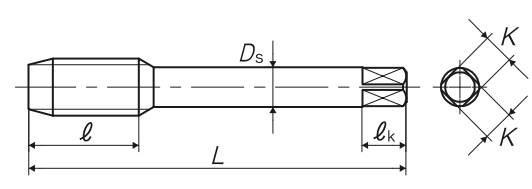
TYPE:2



TYPE:3



TYPE:4



Segment : 1F

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ _n (inch)	D _s (inch)	K (inch)	ℓ _k (inch)	No. of flutes	TYPE
For Metric Threads											
M2.5 × 0.45	D3	Y87320	4.5P	1.812	0.295	0.5	0.141	0.11	0.187	2	1
M3 × 0.5	D3	Y87321	4.5P	1.937	0.374	0.625	0.141	0.11	0.187	3	1
M3.5 × 0.6	D4	Y87322	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
M4 × 0.7	D4	Y87323	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
M5 × 0.8	D4	Y87324	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
M6 × 1	D5	Y87325	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
M7 × 1	D5	Y87326	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
M8 × 1.25	D5	Y87328	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
M8 × 1	D5	Y87327	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
M10 × 1.5	D6	Y87330	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
M10 × 1.25	D5	Y87329	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
M12 × 1.75	D6	Y87332	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
M12 × 1.25	D5	Y87331	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
For Unified Threads											
No.2-56UNC	GH2	Y85523	4.5P	1.75	0.256	0.437	0.141	0.11	0.187	2	1
No.4-40UNC	GH2	Y85501	4.5P	1.875	0.335	0.562	0.141	0.11	0.187	2	1
No.4-40UNC	GH3	Y85502	4.5P	1.875	0.335	0.562	0.141	0.11	0.187	2	1

ANSI

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

3

ANSI

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
No.4-40UNC	GH4	Y85504	4.5P	1.875	0.335	0.562	0.141	0.11	0.187	2	1
No.5-40UNC	GH2	Y85503	4.5P	1.937	0.374	0.625	0.141	0.11	0.187	3	1
No.6-32UNC	GH3	Y85505	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH4	Y85524	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH5	Y85535	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
No.6-32UNC	GH7	Y85511	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
No.6-40UNF	GH2	Y85512	4.5P	2	0.413	0.687	0.141	0.11	0.187	3	1
No.8-32UNC	GH3	Y85507	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH4	Y85529	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH5	Y85537	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH6	Y85560	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
No.8-32UNC	GH7	Y85567	4.5P	2.125	0.453	0.75	0.168	0.131	0.25	3	1
No.10-24UNC	GH3	Y85509	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-24UNC	GH5	Y85539	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH2	Y85541	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH3	Y85510	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH4	Y85530	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH5	Y85540	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH6	Y85561	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
No.10-32UNF	GH7	Y85570	4.5P	2.375	0.531	0.875	0.194	0.152	0.25	3	1
1/4-20UNC	GH3	Y85513	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-20UNC	GH5	Y85543	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH3	Y85514	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	Y85531	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH5	Y85544	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH6	Y85562	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH7	Y85574	4.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
5/16-18UNC	GH3	Y85515	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-18UNC	GH5	Y85545	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-18UNC	GH7	Y85553	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH3	Y85516	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH4	Y85532	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH5	Y85546	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH6	Y85563	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH7	Y85576	4.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
3/8-16UNC	GH3	Y85517	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-16UNC	GH5	Y85547	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH3	Y85518	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH4	Y85533	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH5	Y85548	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH6	Y85564	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH7	Y85578	4.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
7/16-14UNC	GH3	Y85519	4.5P	3.156	0.866	-	0.323	0.242	0.406	3	4
7/16-14UNC	GH5	Y85549	4.5P	3.156	0.866	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH3	Y85520	4.5P	3.156	0.866	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH5	Y85550	4.5P	3.156	0.866	-	0.323	0.242	0.406	3	4
1/2-13UNC	GH3	Y85521	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH5	Y85551	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
1/2-13UNC	GH7	Y85581	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH3	Y85522	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4

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

③-110

③ Spiral Pointed Tap Series for through 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 PO Spiral Pointed 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
1/2-20UNF	GH5	Y85552	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH7	Y85582	4.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
5/8-11UNC	GH3	Y85525	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
5/8-11UNC	GH5	Y85555	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
5/8-11UNC	GH7	Y85585	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH3	Y85526	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH5	Y85556	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH7	Y85586	4.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
3/4-10UNC	GH3	Y85527	4.5P	4.25	1.201	-	0.59	0.442	0.687	3	4
3/4-10UNC	GH5	Y85557	4.5P	4.25	1.201	-	0.59	0.442	0.687	3	4
3/4-16UNF	GH3	Y85528	4.5P	4.25	1.201	-	0.59	0.442	0.687	3	4
3/4-16UNF	GH5	Y85558	4.5P	4.25	1.201	-	0.59	0.442	0.687	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

③-111

Think threads with
YAMAWA

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

Spiral Pointed Tap Series for through 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

3

DIN

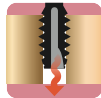
DIN

ZEN-P



Spiral Pointed Taps for Nickel Base Alloys

Specification



■ ZEN-P is the spiral pointed 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

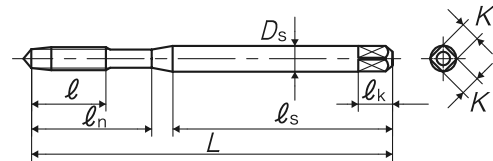
Low carbon steels
低炭素鋼
5~10
(m/min)

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

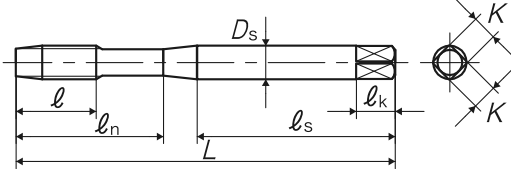
Stainless steels
ステンレス鋼
5~10
(m/min)

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

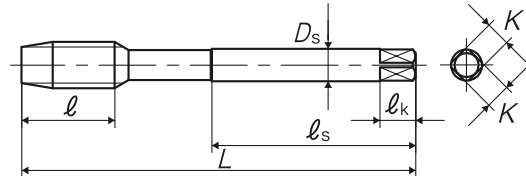
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1F

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	ISO2X	PD3.0GBJPW	4.5P	56	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2X	PD4.0IBJPW	4.5P	63	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2X	PD5.0KBJPW	4.5P	70	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2X	PD6.0MBJPW	4.5P	80	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	PD8.0NBJPW	4.5P	90	19	35	47	8	6.2	9	3	2
M10 × 1.5	ISO2X	PD010OBJPW	4.5P	100	23	39	52.5	10	8	11	3	2
M10 × 1.25	ISO2X	PM010NBJPW	4.5P	100	23	-	51	7	5.5	8	3	3
M12 × 1.75	ISO2X	PG012PBJPW	4.5P	110	26	-	56	9	7	10	3	3
M12 × 1.5	ISO2X	PM012OBJPW	4.5P	100	21	-	51	9	7	10	3	3
M12 × 1.25	ISO2X	PM012NBJPW	4.5P	100	21	-	51	9	7	10	3	3
M14 × 2	ISO2X	PG014QBJPW	4.5P	110	26	-	56	11	9	12	3	3
M14 × 1.5	ISO2X	PM014OBJPW	4.5P	100	21	-	51	11	9	12	3	3
M16 × 2	ISO2X	PG016QBJPW	4.5P	110	26	-	56	12	9	12	3	3
M16 × 1.5	ISO2X	PM016OBJPW	4.5P	100	21	-	51	12	9	12	3	3
M18 × 2.5	ISO2X	PG018RBJPW	4.5P	125	33	-	64	14	11	14	3	3
M20 × 2.5	ISO2X	PG020RBJPW	4.5P	140	33	-	71	16	12	15	3	3
M22 × 2.5	ISO2X	PG022RBJPW	4.5P	140	33	-	71	18	14.5	17	3	3
M24 × 3	ISO2X	PG024SBJPW	4.5P	160	37	-	82	18	14.5	17	3	3

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

③-112

③ Spiral Pointed Tap Series for through 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

ZEN-P Spiral Pointed 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
For Unified Threads												
No.6-32UNC	2BX	PDUN6JYJPW	4.5P	56	11	19	32	4	3	6	3	1
No.8-32UNC	2BX	PDUN8JYJPW	4.5P	63	13	21	38	4.5	3.4	6	3	1
No.10-24UNC	2BX	PDUNAMYJPW	4.5P	70	14	24	39	6	4.9	8	3	1
No.10-32UNF	2BX	PDUNAJYJPW	4.5P	70	14	24	39	6	4.9	8	3	1
1/4-20UNC	2BX	PDU04NYJPW	4.5P	80	15	30	42	7	5.5	8	3	1
1/4-28UNF	2BX	PDU04KYJPW	4.5P	80	15	30	42	7	5.5	8	3	1
5/16-18UNC	2BX	PDU05OYJPW	4.5P	90	19	35	47	8	6.2	9	3	2
5/16-24UNF	2BX	PMU05MYJPW	4.5P	90	19	-	46	6	4.9	8	3	3
3/8-16UNC	2BX	PDU06PYJPW	4.5P	100	23	39	54.5	9	7	10	3	2
3/8-24UNF	2BX	PMU06MYJPW	4.5P	100	23	-	51	7	5.5	8	3	3
1/2-13UNC	2BX	PGU08RYJPW	4.5P	110	26	-	56	9	7	10	3	3
1/2-20UNF	2BX	PMU08NYJPW	4.5P	100	21	-	51	9	7	10	3	3
5/8-11UNC	2BX	PGU10UYJPW	4.5P	110	26	-	56	12	9	12	3	3
5/8-18UNF	2BX	PMU10OYJPW	4.5P	100	21	-	51	12	9	12	3	3
3/4-10UNC	2BX	PGU12VYJPW	4.5P	125	33	-	64	14	11	14	3	3
3/4-16UNF	2BX	PMU12PYJPW	4.5P	110	24	-	56	14	11	14	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

③-113

Think threads with
YAMAWA

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

Spiral Pointed Tap Series for through 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

3

JIS

PM-PO

Spiral Pointed Taps for Hard-to-Machine Materials



Specification



■Spiral pointed tap suitable for high hardness steels of 25 ~ 45HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and die steel. Through hole use.

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)	5~10 (m/min)	~5 (m/min)
	25~35HRC	35~45HRC

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

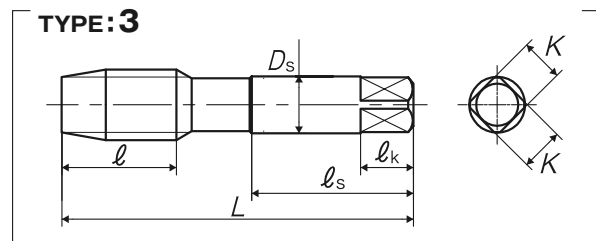
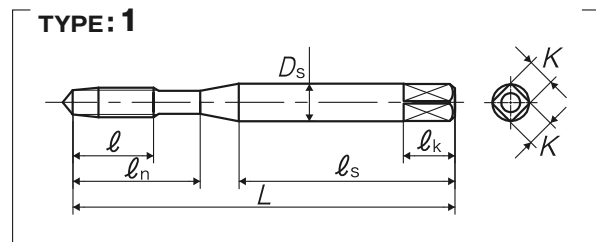
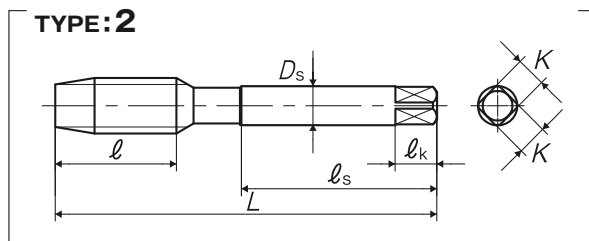
Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫

JIS

③-114

Segment : 1F



Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M3 × 0.5	P3	PY3.0GRDPB	5.5P	46	9	14	26	4	3.2	6	3	1	¥ 2,020 ※
M4 × 0.7	P3	PY4.0IRDPB	5.5P	52	11	17	29	5	4	7	3	1	¥ 2,020 ※
M5 × 0.8	P3	PY5.0KRDPB	5.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 2,030 ※
M6 × 1	P3	PY6.0MRDPB	5.5P	62	15	26	33	6	4.5	7	3	1	¥ 2,240 ※
M8 × 1.25	P4	PY8.0NSDPB	5.5P	70	19	-	36	6.2	5	8	3	2	¥ 3,130 ※
M10 × 1.5	P4	PY010OSDPB	5.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,970 ※
M10 × 1.25	P4	PY010NSDPB	5.5P	75	23	-	38	7	5.5	8	3	2	¥ 3,970 ※
M12 × 1.75	P4	PY012PSDPB	5.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,630 ※
M12 × 1.5	P4	PY012OSDPB	5.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,630 ※
M12 × 1.25	P4	PY012NSDPB	5.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 5,630 ※
M14 × 2	P5	PY014QTDPB	5.5P	88	26	-	45	10.5	8	11	3	2	¥ 7,670 ※
M14 × 1.5	P4	PY014OSDPB	5.5P	88	26	-	45	10.5	8	11	3	2	¥ 7,670 ※
M16 × 2	P5	PY016QTDPB	5.5P	95	26	-	48	12.5	10	13	3	2	¥ 10,300 ※
M16 × 1.5	P4	PY016OSDPB	5.5P	95	26	-	48	12.5	10	13	3	2	¥ 10,300 ※
M18 × 2.5	P5	PY018RTDPB	5.5P	100	33	-	51	14	11	14	3	2	¥ 13,900 ※
M18 × 1.5	P4	PY018OSDPB	5.5P	100	33	-	51	14	11	14	3	2	¥ 13,900 ※
M20 × 2.5	P5	PY020RTDPB	5.5P	105	33	-	50	15	12	15	3	3	¥ 18,700 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

③ Spiral Pointed Tap Series for through 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-PO Spiral Pointed Taps for Hard-to-Machine Materials

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M20 × 1.5	P4	PY020OSDPB	5.5P	105	33	-	50	15	12	15	3	3	¥ 18,700 ※
M22 × 2.5	P5	PY022RTDPB	5.5P	115	33	-	55	17	13	16	3	3	¥ 23,900 ※
M22 × 1.5	P4	PY022OSDPB	5.5P	115	33	-	55	17	13	16	3	3	¥ 23,900 ※
M24 × 3	P5	PY024STDPB	5.5P	120	39	-	55	19	15	18	3	3	¥ 29,900 ※
M24 × 1.5	P4	PY024OSDPB	5.5P	120	39	-	55	19	15	18	3	3	¥ 29,900 ※
M27 × 3	P5	PY027STDPB	5.5P	130	39	-	60	20	15	18	4	3	¥ 41,800 ※
M27 × 1.5	P4	PY027OSDPB	5.5P	130	39	-	60	20	15	18	4	3	¥ 41,800 ※
M30 × 3.5	P5	PY030TTDPB	5.5P	135	46	-	62	23	17	20	4	3	¥ 53,300 ※
M30 × 1.5	P4	PY030OSDPB	5.5P	135	46	-	62	23	17	20	4	3	¥ 53,300 ※
For Unified Threads													
No.6-32UNC	P2	PYUN6JQDPB	5.5P	52	11	17	27	5	4	7	2	1	¥ 2,380 ※
No.6-40UNF	P2	PYUN6HQDPB	5.5P	52	11	17	27	5	4	7	2	1	¥ 2,380 ※
No.8-32UNC	P2	PYUN8JQDPB	5.5P	60	13	22	31	5.5	4.5	7	2	1	¥ 2,390 ※
No.8-36UNF	P2	PYUN8IQDPB	5.5P	60	13	22	31	5.5	4.5	7	2	1	¥ 2,390 ※
No.10-24UNC	P2	PYUNAMQDPB	5.5P	60	13	22	32	5.5	4.5	7	2	1	¥ 2,390 ※
No.10-32UNF	P2	PYUNA JQDPB	5.5P	60	13	22	32	5.5	4.5	7	2	1	¥ 2,390 ※
No.12-24UNC	P2	PYUNCMQDPB	5.5P	62	15	26	32	6	4.5	7	2	1	¥ 2,560 ※
No.12-28UNF	P2	PYUNCKQDPB	5.5P	62	15	26	32	6	4.5	7	2	1	¥ 2,560 ※
1/4-20UNC	P3	PYU04NRDPB	5.5P	62	15	26	33	6	4.5	7	3	1	¥ 2,560 ※
1/4-28UNF	P3	PYU04KRDPB	5.5P	62	15	26	33	6	4.5	7	3	1	¥ 2,560 ※
5/16-18UNC	P3	PYU05ORDPB	5.5P	70	19	-	36	6.2	5	8	3	2	¥ 3,600 ※
5/16-24UNF	P3	PYU05MRDPB	5.5P	70	19	-	36	6.2	5	8	3	2	¥ 3,600 ※
3/8-16UNC	P4	PYU06PSDPB	5.5P	75	23	-	38	7	5.5	8	3	2	¥ 4,610 ※
3/8-24UNF	P3	PYU06MRDPB	5.5P	75	23	-	38	7	5.5	8	3	2	¥ 4,610 ※
7/16-14UNC	P4	PYU07QSDPB	5.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,490 ※
7/16-20UNF	P3	PYU07NRDPB	5.5P	82	26	-	42	8.5	6.5	9	3	2	¥ 6,490 ※
1/2-13UNC	P4	PYU08RSDPB	5.5P	88	26	-	45	10.5	8	11	3	2	¥ 6,880 ※
1/2-20UNF	P4	PYU08NSDPB	5.5P	88	26	-	45	10.5	8	11	3	2	¥ 6,880 ※
9/16-12UNC	P4	PYU09SSDPB	5.5P	95	26	-	48	12.5	10	13	3	2	¥ 10,300 ※
9/16-18UNF	P4	PYU09OSDPB	5.5P	95	26	-	48	12.5	10	13	3	2	¥ 10,300 ※
5/8-11UNC	P5	PYU10UTDPB	5.5P	95	26	-	48	12.5	10	13	3	2	¥ 10,300 ※
5/8-18UNF	P4	PYU10OSDPB	5.5P	95	26	-	48	12.5	10	13	3	2	¥ 10,300 ※
3/4-10UNC	P5	PYU12VTPB	5.5P	105	33	-	50	15	12	15	3	3	¥ 18,700 ※
3/4-16UNF	P4	PYU12PSDPB	5.5P	105	33	-	50	15	12	15	3	3	¥ 18,700 ※
7/8-9UNC	P5	PYU14WTPB	5.5P	115	33	-	55	17	13	16	3	3	¥ 26,400 ※
7/8-14UNF	P4	PYU14QSDPB	5.5P	115	33	-	55	17	13	16	3	3	¥ 26,400 ※
1 -8UNC	P6	PYU16XUDPB	5.5P	125	39	-	58	19	15	18	3	3	¥ 38,900 ※
1 -12UNF	P5	PYU16STDPB	5.5P	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

PM-PO

Spiral Pointed Taps for Hard-to-Machine Materials



Specification

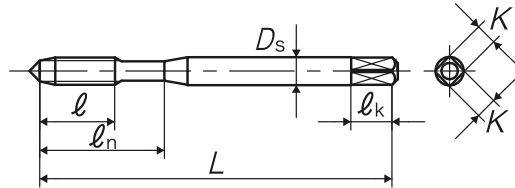


■ Spiral pointed tap suitable for high hardness steels of 25~45HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and die steel. Through hole use.

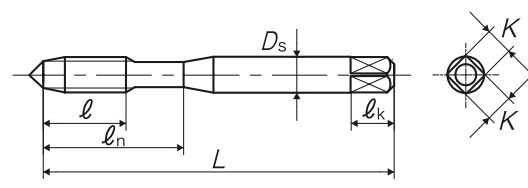
Tapping Speeds depending on Materials

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

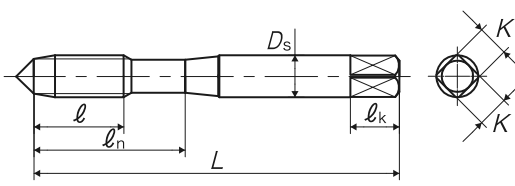
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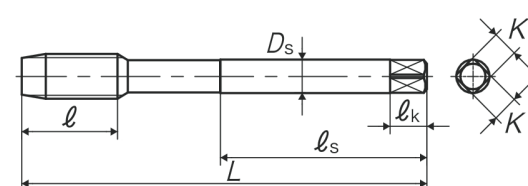
TYPE:2



TYPE:3



TYPE:4



Segment : 1F

Size	Class	Code	Chamfer	L (inch)	l (inch)	ln (inch)	Ds (inch)	K (inch)	lk (inch)	No. of flutes	TYPE
For Unified Threads											
No.6-32UNC	GH3	PAUN6J3DPB	5.5P	2	0.413	0.687	0.141	0.11	0.187	2	1
No.6-40UNF	GH3	PAUN6H3DPB	5.5P	2	0.413	0.687	0.141	0.11	0.187	2	1
No.8-32UNC	GH3	PAUN8J3DPB	5.5P	2.125	0.453	0.75	0.168	0.131	0.25	2	1
No.8-36UNF	GH3	PAUN8I3DPB	5.5P	2.125	0.453	0.75	0.168	0.131	0.25	2	1
No.10-24UNC	GH3	PAUNAM3DPB	5.5P	2.375	0.531	0.875	0.194	0.152	0.25	2	1
No.10-32UNF	GH3	PAUNAJ3DPB	5.5P	2.375	0.531	0.875	0.194	0.152	0.25	2	1
No.12-24UNC	GH3	PAUNCM3DPB	5.5P	2.375	0.571	0.937	0.22	0.165	0.281	2	1
No.12-28UNF	GH3	PAUNCK3DPB	5.5P	2.375	0.571	0.937	0.22	0.165	0.281	2	1
1/4-20UNC	GH4	PAU04N4DPB	5.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
1/4-28UNF	GH4	PAU04K4DPB	5.5P	2.5	0.591	1	0.255	0.191	0.312	3	2
5/16-18UNC	GH5	PAU05O5DPB	5.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
5/16-24UNF	GH5	PAU05M5DPB	5.5P	2.718	0.669	1.125	0.318	0.238	0.375	3	3
3/8-16UNC	GH6	PAU06P6DPB	5.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
3/8-24UNF	GH5	PAU06M5DPB	5.5P	2.937	0.748	1.25	0.381	0.286	0.437	3	3
7/16-14UNC	GH6	PAU07Q6DPB	5.5P	3.156	0.866	-	0.323	0.242	0.406	3	4
7/16-20UNF	GH5	PAU07N5DPB	5.5P	3.156	0.866	-	0.323	0.242	0.406	3	4
1/2-13UNC	GH6	PAU08R6DPB	5.5P	3.375	0.984	-	0.367	0.275	0.437	3	4
1/2-20UNF	GH6	PAU08N6DPB	5.5P	3.375	0.984	-	0.367	0.275	0.437	3	4

③ Spiral Pointed Tap Series for through hole

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

ANSI

PM-PO Spiral Pointed Taps for Hard-to-Machine Materials

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
9/16-12UNC	GH6	PAU09S6DPB	5.5P	3.593	0.984	-	0.429	0.322	0.5	3	4
9/16-18UNF	GH6	PAU09O6DPB	5.5P	3.593	0.984	-	0.429	0.322	0.5	3	4
5/8-11UNC	GH7	PAU10U7DPB	5.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
5/8-18UNF	GH6	PAU10O6DPB	5.5P	3.812	1.083	-	0.48	0.36	0.562	3	4
3/4-10UNC	GH7	PAU12V7DPB	5.5P	4.25	1.201	-	0.59	0.442	0.687	3	4
3/4-16UNF	GH6	PAU12P6DPB	5.5P	4.25	1.201	-	0.59	0.442	0.687	3	4
7/8-9UNC	GH7	PAU14W7DPB	5.5P	4.687	1.339	-	0.697	0.523	0.75	3	4
7/8-14UNF	GH6	PAU14Q6DPB	5.5P	4.687	1.339	-	0.697	0.523	0.75	3	4
1 -8UNC	GH8	PAU16X8DPB	5.5P	5.125	1.496	-	0.8	0.6	0.812	3	4
1 -12UNF	GH7	PAU16S7DPB	5.5P	5.125	1.496	-	0.8	0.6	0.812	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

③-117

Think threads with
YAMAWA

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

Spiral Pointed Tap Series for through hole

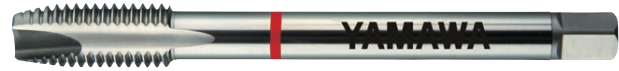
Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓ	ℓ _n	ℓ _s	D _s	K	ℓ _k

3

DIN

DIN

PM-PO



Spiral Pointed Taps for Hard-to-Machine Materials

Specification

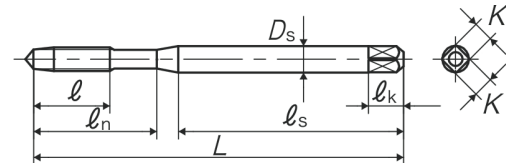


■ Spiral pointed tap suitable for high hardness steels of 25 ~ 45HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and die steel. Through hole use.

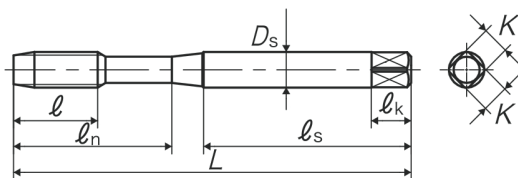
Tapping Speeds depending on Materials

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

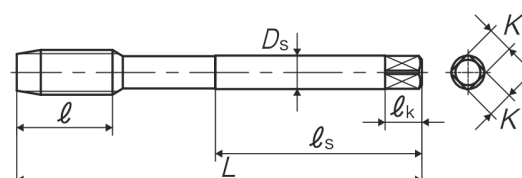
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1F

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	ISO2X	PD3.0GBDPB	5.5P	56	9	18	34	3.5	2.7	6	3	1
M4 × 0.7	ISO2X	PD4.0IBDPB	5.5P	63	13	21	38	4.5	3.4	6	3	1
M5 × 0.8	ISO2X	PD5.0KBDPB	5.5P	70	14	25	39	6	4.9	8	3	1
M6 × 1	ISO2X	PD6.0MBDPB	5.5P	80	15	30	45	6	4.9	8	3	1
M8 × 1.25	ISO2X	PD8.0NBDPB	5.5P	90	19	35	47	8	6.2	9	3	2
M10 × 1.5	ISO2X	PD010OBDPB	5.5P	100	23	39	52.5	10	8	11	3	2
M10 × 1.25	ISO2X	PM010NBDPB	5.5P	100	23	-	51	7	5.5	8	3	3
M12 × 1.75	ISO2X	PG012PBDPB	5.5P	110	26	-	56	9	7	10	3	3
M12 × 1.5	ISO2X	PM012OBDPB	5.5P	100	21	-	51	9	7	10	3	3
M12 × 1.25	ISO2X	PM012NBDPB	5.5P	100	21	-	51	9	7	10	3	3
M14 × 2	ISO2X	PG014QBDPB	5.5P	110	26	-	56	11	9	12	3	3
M14 × 1.5	ISO2X	PM014OBDPB	5.5P	100	21	-	51	11	9	12	3	3
M16 × 2	ISO2X	PG016QBDPB	5.5P	110	26	-	56	12	9	12	3	3
M16 × 1.5	ISO2X	PM016OBDPB	5.5P	100	21	-	51	12	9	12	3	3
M18 × 2.5	ISO2X	PG018RBDPB	5.5P	125	33	-	64	14	11	14	3	3
M18 × 1.5	ISO2X	PM018OBDPB	5.5P	110	24	-	56	14	11	14	3	3
M20 × 2.5	ISO2X	PG020RBDPB	5.5P	140	33	-	71	16	12	15	3	3

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

③-118

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

Think threads with
YAMAWA

③ Spiral Pointed Tap Series for through 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

PM-PO Spiral Pointed Taps for Hard-to-Machine Materials

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M20 × 1.5	ISO2X	PM020OBDBP	5.5P	125	24	-	64	16	12	15	3	3
M22 × 2.5	ISO2X	PG022RBDPB	5.5P	140	33	-	71	18	14.5	17	3	3
M22 × 1.5	ISO2X	PM022OBDBP	5.5P	125	24	-	64	18	14.5	17	3	3
M24 × 3	ISO2X	PG024SBDPB	5.5P	160	37	-	82	18	14.5	17	3	3
M24 × 1.5	ISO2X	PM024OBDBP	5.5P	140	27	-	71	18	14.5	17	3	3
M27 × 3	ISO2X	PG027SBDPB	5.5P	160	37	-	82	20	16	19	4	3
M27 × 1.5	ISO2X	PM027OBDBP	5.5P	140	27	-	71	20	16	19	4	3
M30 × 3.5	ISO2X	PG030TBDPB	5.5P	180	44	-	92	22	18	21	4	3
M30 × 1.5	ISO2X	PM030OBDBP	5.5P	150	27	-	77	22	18	21	4	3
For Unified Threads												
No.6-32UNC	2B	PDUN6JXDPB	5.5P	56	11	19	32	4	3	6	2	1
No.6-40UNF	2B	PDUN6HXDPB	5.5P	56	11	19	32	4	3	6	2	1
No.8-32UNC	2B	PDUN8JXDPB	5.5P	63	13	21	38	4.5	3.4	6	2	1
No.8-36UNF	2B	PDUN8IXDPB	5.5P	63	13	21	38	4.5	3.4	6	2	1
No.10-24UNC	2B	PDUNAMXDPB	5.5P	70	14	24	39	6	4.9	8	2	1
No.10-32UNF	2B	PDUNAJXDPB	5.5P	70	14	24	39	6	4.9	8	2	1
No.12-24UNC	2B	PDUNCMXDPB	5.5P	80	15	28	45	6	4.9	8	2	1
No.12-28UNF	2B	PDUNCCKXPB	5.5P	80	15	28	45	6	4.9	8	2	1
1/4-20UNC	2BX	PDU04NYDPB	5.5P	80	15	30	42	7	5.5	8	3	1
1/4-28UNF	2BX	PDU04KYDPB	5.5P	80	15	30	42	7	5.5	8	3	1
5/16-18UNC	2BX	PDU05OYDPB	5.5P	90	19	35	47	8	6.2	9	3	2
5/16-24UNF	2BX	PMU05MYDPB	5.5P	90	19	-	46	6	4.9	8	3	3
3/8-16UNC	2BX	PDU06PYDPB	5.5P	100	23	39	54.5	9	7	10	3	2
3/8-24UNF	2BX	PMU06MYDPB	5.5P	100	23	-	51	7	5.5	8	3	3
7/16-14UNC	2BX	PGU07QYDPB	5.5P	100	23	-	51	8	6.2	9	3	3
7/16-20UNF	2BX	PMU07NYDPB	5.5P	100	23	-	51	8	6.2	9	3	3
1/2-13UNC	2BX	PGU08RYDPB	5.5P	110	26	-	56	9	7	10	3	3
1/2-20UNF	2BX	PMU08NYDPB	5.5P	100	21	-	51	9	7	10	3	3
9/16-12UNC	2BX	PGU09SYDPB	5.5P	110	26	-	56	11	9	12	3	3
9/16-18UNF	2BX	PMU09OYDPB	5.5P	100	21	-	51	11	9	12	3	3
5/8-11UNC	2BX	PGU10UYDPB	5.5P	110	26	-	56	12	9	12	3	3
5/8-18UNF	2BX	PMU10OYDPB	5.5P	100	21	-	51	12	9	12	3	3
3/4-10UNC	2BX	PGU12VYDPB	5.5P	125	33	-	64	14	11	14	3	3
3/4-16UNF	2BX	PMU12PYDPB	5.5P	110	24	-	56	14	11	14	3	3
7/8-9UNC	2BX	PGU14WYDPB	5.5P	140	33	-	71	18	14.5	17	3	3
7/8-14UNF	2BX	PMU14QYDPB	5.5P	125	24	-	64	18	14.5	17	3	3
1-8UNC	2BX	PGU16XYDPB	5.5P	160	37	-	82	18	14.5	17	3	3
1-12UNF	2BX	PMU16SYDPB	5.5P	140	27	-	71	18	14.5	17	3	3

⑩

⑪

⑫

DIN

③-119



• 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	D _s	K	ℓ _k

3

JIS

LS-PM-PO

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



Specification

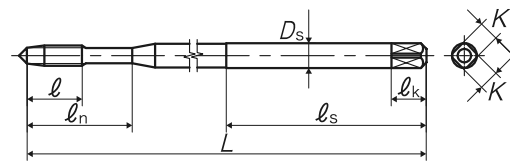


■ Long shank spiral pointed tap suitable for high hardness steels of 25 ~ 45HRC such as forgings and thermal refined steels of high carbon steels and alloy steels, and die steel. Through hole use.

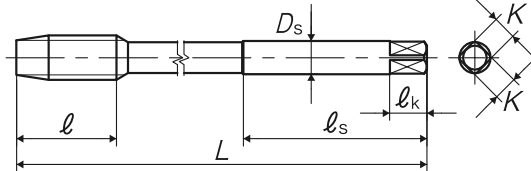
Tapping Speeds depending on Materials

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

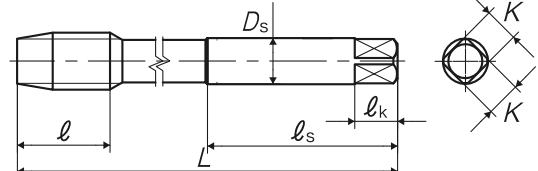
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1F

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M3 × 0.5	P3	P43.0GRDPBE	5.5P	100	9	18	40	4	3.2	6	3	1	¥ 5,770 ※
M4 × 0.7	P3	P44.0IRDPE	5.5P	100	11	21	40	5	4	7	3	1	¥ 5,270 ※
M5 × 0.8	P3	P45.0KRDPBE	5.5P	100	13	25	40	5.5	4.5	7	3	1	¥ 4,620 ※
M6 × 1	P3	P46.0MRDPBE	5.5P	100	15	30	40	6	4.5	7	3	1	¥ 3,950 ※
M6 × 1	P3	P46.0MRDPBG	5.5P	150	15	30	40	6	4.5	7	3	1	¥ 6,970 ※
M8 × 1.25	P4	PY8.0NSDPBE	5.5P	100	19	-	50	6.2	5	8	3	2	¥ 5,110 ※
M8 × 1.25	P4	PY8.0NSDPBG	5.5P	150	19	-	50	6.2	5	8	3	2	¥ 8,690 ※
M10 × 1.5	P4	PY010OSDPBG	5.5P	150	23	-	50	7	5.5	8	3	2	¥ 10,200 ※
M10 × 1.25	P4	PY010NSDPBG	5.5P	150	23	-	50	7	5.5	8	3	2	¥ 10,200 ※
M12 × 1.75	P4	PY012PSDPBG	5.5P	150	26	-	50	8.5	6.5	9	3	2	¥ 12,800 ※
M12 × 1.5	P4	PY012OSDPBG	5.5P	150	26	-	50	8.5	6.5	9	3	2	¥ 12,800 ※
M12 × 1.25	P4	PY012NSDPBG	5.5P	150	26	-	50	8.5	6.5	9	3	2	¥ 12,800 ※
M14 × 2	P5	PY014QTDPBG	5.5P	150	26	-	60	10.5	8	11	3	2	¥ 15,900 ※
M14 × 1.5	P4	PY014OSDPBG	5.5P	150	26	-	60	10.5	8	11	3	2	¥ 15,900 ※
M16 × 2	P5	PY016QTDPBG	5.5P	150	26	-	60	12.5	10	13	3	2	¥ 17,300 ※
M16 × 1.5	P4	PY016OSDPBG	5.5P	150	26	-	60	12.5	10	13	3	2	¥ 17,300 ※
M18 × 2.5	P5	PY018RTDPBG	5.5P	150	33	-	70	14	11	14	3	2	¥ 23,600 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

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

③-120

③ Spiral Pointed Tap Series for through 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-PM-PO Long Shank Spiral Pointed Taps for Hard-to-Machine Materials

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M18 × 1.5	P4	PY018OSDPBG	5.5P	150	33	-	70	14	11	14	3	2	¥ 23,600 ※
M20 × 2.5	P5	PY020RTDPBG	5.5P	150	33	-	70	15	12	15	3	3	¥ 30,300 ※
M20 × 1.5	P4	PY020OSDPBG	5.5P	150	33	-	70	15	12	15	3	3	¥ 30,300 ※
M22 × 2.5	P5	PY022RTDPBK	5.5P	200	33	-	70	17	13	16	3	3	¥ 41,800 ※
M22 × 1.5	P4	PY022OSDPBK	5.5P	200	33	-	70	17	13	16	3	3	¥ 41,800 ※
M24 × 3	P5	PY024STDPBK	5.5P	200	39	-	80	19	15	18	3	3	¥ 47,000 ※
M24 × 1.5	P4	PY024OSDPBK	5.5P	200	39	-	80	19	15	18	3	3	¥ 47,000 ※
M27 × 3	P5	PY027STDPBK	5.5P	200	39	-	80	20	15	18	4	3	¥ 52,700 ※
M27 × 1.5	P4	PY027OSDPBK	5.5P	200	39	-	80	20	15	18	4	3	¥ 52,700 ※
M30 × 3.5	P5	PY030TTDPBK	5.5P	200	46	-	80	23	17	20	4	3	¥ 67,600 ※
M30 × 1.5	P4	PY030OSDPBK	5.5P	200	46	-	80	23	17	20	4	3	¥ 67,600 ※

① Spiral Fluted Taps
(for through 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

③-121

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

Spiral Pointed Tap Series for through 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

3

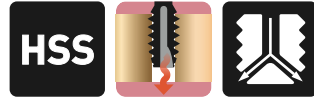
JIS

MC-PO

Spiral Pointed Taps with Coolant Through Hole



Specification

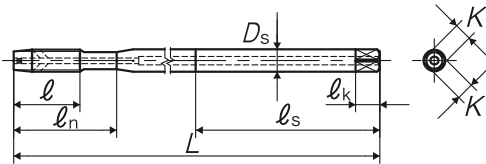


■ Adopting coolant through hole (radial through type) realizing sufficient coolant supply to the cutting area, MC-PO spiral pointed tap ensures a long tool life and internal threads with good surface finish.

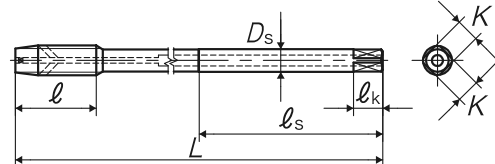
Tapping Speeds depending on Materials

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 : 1E

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M6 × 1	P2	MPHQ6.0ML10	5P	100	19	30	40	6	4.5	7	3	1	¥ 3,390 ※▲
M6 × 1	P2	MPHQ6.0ML15	5P	150	19	30	40	6	4.5	7	3	1	¥ 5,790 ※▲
M8 × 1.25	P3	MPHR8.0NL10	5P	100	22	-	50	6.2	5	8	3	2	¥ 4,390 ※▲
M8 × 1.25	P3	MPHR8.0NL15	5P	150	22	-	50	6.2	5	8	3	2	¥ 7,230 ※▲
M10 × 1.5	P3	MPHR010OL10	5P	100	24	-	50	7	5.5	8	3	2	¥ 5,340 ※▲
M10 × 1.5	P3	MPHR010OL15	5P	150	24	-	50	7	5.5	8	3	2	¥ 8,440 ※▲
M10 × 1.25	P3	MPHR010NL10	5P	100	24	-	50	7	5.5	8	3	2	¥ 5,340 ※▲
M10 × 1.25	P3	MPHR010NL15	5P	150	24	-	50	7	5.5	8	3	2	¥ 8,440 ※▲
M12 × 1.75	P4	MPHS012PL10	5P	100	29	-	50	8.5	6.5	9	3	2	¥ 6,550 ※▲
M12 × 1.75	P4	MPHS012PL15	5P	150	29	-	50	8.5	6.5	9	3	2	¥ 10,600 ※▲
M12 × 1.75	P4	MPHS012PL20	5P	200	29	-	50	8.5	6.5	9	3	2	¥ 14,200 ※▲
M12 × 1.5	P3	MPHR012OL10	5P	100	29	-	50	8.5	6.5	9	3	2	¥ 6,550 ※▲
M12 × 1.5	P3	MPHR012OL15	5P	150	29	-	50	8.5	6.5	9	3	2	¥ 10,600 ※▲
M12 × 1.5	P3	MPHR012OL20	5P	200	29	-	50	8.5	6.5	9	3	2	¥ 14,200 ※▲
M12 × 1.25	P4	MPHS012NL10	5P	100	24	-	50	8.5	6.5	9	3	2	¥ 6,550 ※▲
M12 × 1.25	P4	MPHS012NL15	5P	150	24	-	50	8.5	6.5	9	3	2	¥ 10,600 ※▲
M12 × 1.25	P4	MPHS012NL20	5P	200	24	-	50	8.5	6.5	9	3	2	¥ 14,200 ※▲
M14 × 2	P4	MPHS014QL15	5P	150	30	-	60	10.5	8	11	3	2	¥ 13,500 ※▲
M14 × 2	P4	MPHS014QL20	5P	200	30	-	60	10.5	8	11	3	2	¥ 17,300 ※▲
M14 × 1.5	P3	MPHR014OL15	5P	150	30	-	60	10.5	8	11	3	2	¥ 13,500 ※▲
M14 × 1.5	P3	MPHR014OL20	5P	200	30	-	60	10.5	8	11	3	2	¥ 17,300 ※▲
M16 × 2	P4	MPHS016QL15	5P	150	32	-	60	12.5	10	13	3	2	¥ 14,600 ※▲
M16 × 2	P4	MPHS016QL20	5P	200	32	-	60	12.5	10	13	3	2	¥ 18,000 ※▲
M16 × 1.5	P3	MPHR016OL15	5P	150	32	-	60	12.5	10	13	3	2	¥ 14,600 ※▲

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

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

③-122

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

③ Spiral Pointed Tap Series for through 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

MC-PO Spiral Pointed Taps with Coolant Through Hole

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	P3	MPHR016OL20	5P	200	32	-	60	12.5	10	13	3	2	¥ 18,000 ※▲
M18 × 2.5	P4	MPHS018RL15	5P	150	37	-	70	14	11	14	3	2	¥ 16,800 ※▲
M18 × 2.5	P4	MPHS018RL20	5P	200	37	-	70	14	11	14	3	2	¥ 21,900 ※▲
M18 × 1.5	P4	MPHS018OL15	5P	150	29	-	70	14	11	14	3	2	¥ 16,800 ※▲
M18 × 1.5	P4	MPHS018OL20	5P	200	29	-	70	14	11	14	3	2	¥ 21,900 ※▲
M20 × 2.5	P4	MPHS020RL15	5P	150	37	-	70	15	12	15	3	2	¥ 21,400 ※▲
M20 × 2.5	P4	MPHS020RL20	5P	200	37	-	70	15	12	15	3	2	¥ 28,100 ※▲
M20 × 1.5	P4	MPHS020OL15	5P	150	29	-	70	15	12	15	3	2	¥ 21,400 ※▲
M20 × 1.5	P4	MPHS020OL20	5P	200	29	-	70	15	12	15	3	2	¥ 28,100 ※▲
M22 × 2.5	P4	MPHS022RL15	5P	150	38	-	70	17	13	16	3	2	¥ 24,000 ※▲
M22 × 2.5	P4	MPHS022RL20	5P	200	38	-	70	17	13	16	3	2	¥ 31,200 ※▲
M22 × 1.5	P4	MPHS022OL15	5P	150	33	-	70	17	13	16	3	2	¥ 24,000 ※▲
M22 × 1.5	P4	MPHS022OL20	5P	200	33	-	70	17	13	16	3	2	¥ 31,200 ※▲
M24 × 3	P4	MPHS024SL15	5P	150	45	-	80	19	15	18	3	2	¥ 28,100 ※▲
M24 × 3	P4	MPHS024SL20	5P	200	45	-	80	19	15	18	3	2	¥ 35,100 ※▲
M24 × 1.5	P4	MPHS024OL15	5P	150	35	-	80	19	15	18	3	2	¥ 28,100 ※▲
M24 × 1.5	P4	MPHS024OL20	5P	200	35	-	80	19	15	18	3	2	¥ 35,100 ※▲
M27 × 3	P4	MPHS027SL20	5P	200	45	-	80	20	15	18	4	2	¥ 39,600 ※▲
M27 × 3	P4	MPHS027SL25	5P	250	45	-	80	20	15	18	4	2	¥ 53,300 ※▲
M27 × 1.5	P4	MPHS027OL20	5P	200	37	-	80	20	15	18	4	2	¥ 39,600 ※▲
M27 × 1.5	P4	MPHS027OL25	5P	250	37	-	80	20	15	18	4	2	¥ 53,300 ※▲
M30 × 3.5	P5	MPHT030TL20	5P	200	48	-	80	23	17	20	4	2	¥ 50,900 ※▲
M30 × 3.5	P5	MPHT030TL25	5P	250	48	-	80	23	17	20	4	2	¥ 67,300 ※▲
M30 × 1.5	P4	MPHS030OL20	5P	200	37	-	80	23	17	20	4	2	¥ 50,900 ※▲
M30 × 1.5	P4	MPHS030OL25	5P	250	37	-	80	23	17	20	4	2	¥ 67,300 ※▲

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

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