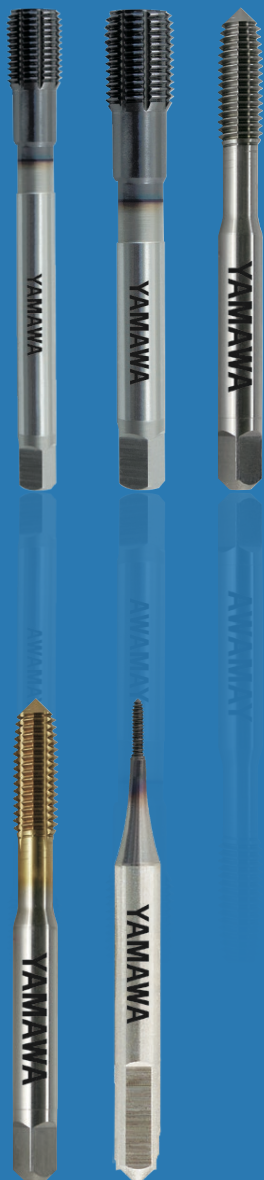


JIS • ANSI • DIN

LINE UP

⑥ ROLL TAP SERIES



	JIS	ANSI	DIN
Z-PRO EHRZ	⑥-3		
Z-PRO MHRZ	⑥-5	⑥-11	⑥-13
MHRZ - J	⑥-9		
N+RZ	⑥-15		⑥-24
N - RZ		⑥-20	
LS-N-RZ	⑥-25		
N+RS	⑥-27		⑥-37
N - RS		⑥-33	
LS-N-RS	⑥-38		
R+V	⑥-40		
OL+RZ	⑥-43		
OL - RZ		⑥-46	
OL+RZ			⑥-47
HP+RZ	⑥-49		⑥-56
HP - RZ		⑥-53	
SC-TL-RZ	⑥-59		
SURZ	⑥-61		
MS+RS	⑥-63		
HPsRZ	⑥-63		
R-Y	⑥-65		
R-D			⑥-66
R-D (Coating)			⑥-67
R-D (Coating)			⑥-68

Selection chart of taps

Tapping conditions		Machining, in low-speed tapping area									
Product symbol		R-Y	N+RZ N-RZ	N+RS N-RS	LS-N-RZ	LS-N-RS	MS+RS	HPsRZ	SURZ	R+V	
Tap material Surface treatment		HSS	HSS OX	HSS NI	HSS OX	HSS NI	HSS	HSS-P Coating	HSS-P Coating	HSS Coating	
Name		For general purpose	For steel	For nonferrous materials	Long, for steel	Long, for nonferrous materials	For miniature threads	For miniature threads High performance	For stainless steel	Coated	
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		~S25C Low carbon steels	◆ ○	◆ ○	◆ ○	◆ ○	◆ ○	◆ ○	◆ ○	◆ ○	◆ ○
⑧ Pipe Taps		S25C~S45C Medium carbon steels	◆ ○	◆ ○	◆ ○	◆ ○	◆ ○	◆ ○	◆ ○	◆ ○	◆ ○
⑨ Thread Mills Premium Thread Mills		S45C~ High carbon steels						◆ ○	◆ ○	◆ ○	
⑩ Dies		SCM Alloy steels									
⑪ Center Drills Centering Tools		25~35HRC Heat treated steel									
⑫ Precision Machinery/ Medical Surgical Instruments		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]

⑥ Roll Tap Series

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

⑥-3

S

Z-PRO
EHRZ

Z-PRO
Extra Hard Roll Taps

Specification



Tapping Speeds depending on Materials

Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼	Thermal refined steels 調質鋼	Stainless steels ステンレス鋼
10~30 (m/min)	10~30 (m/min)	10~30 (m/min)	10~20 (m/min)	5~15 (m/min)
			25~40HRC	

*For M14 or above, please aim to use a tapping speed that is 30% lower.

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



Product Features

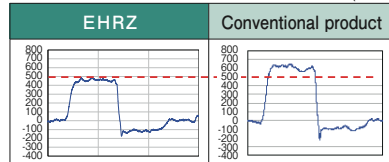
- An appropriate overall length enables reliable external lubrication. It also ensures good internal threading.
- The unique thread relief shape and surface treatment technology maximizes the effect of the coating to reduce torque and prevent welding.
- Wider flutes than the conventional model improve lubrication and cooling performance through a significantly improved lubricant supply.
- A special coating and appropriate base material makes EHRZ suitable for medium-hard steels (up to 40 HRC) and stainless steels.

Tapping Data

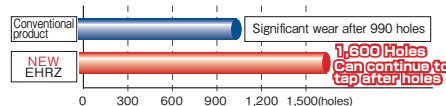
Tapping Conditions [EHRZ G8 M6 x1 B]

Workpiece Material	SCM440 (40HRC)
Bored Hole Size	φ5.53mm
Tapping Length	12mm
Machinery Type	Vertical machining center
Tapping Speed	20m/min
F e e d	Synchronized feed
Tapping Fluid	Water soluble cutting fluid, 1:20 dilution

Diagram of torque at the time of initial machining (N·cm)



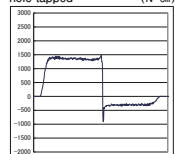
EHRZ shows approximately 20% lower torque compared to the conventional product!



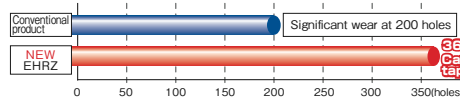
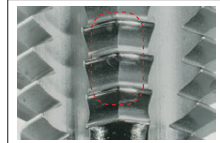
Tapping Conditions [EHRZ G8 M12 x 1.25 B]

Workpiece Material	SCM440 (40HRC)
Bored Hole Size	φ11.4mm
Tapping Length	24mm
Machinery Type	Vertical machining center
Tapping Speed	20m/min
F e e d	Synchronized feed
Tapping Fluid	Water soluble cutting fluid, 1:20 dilution

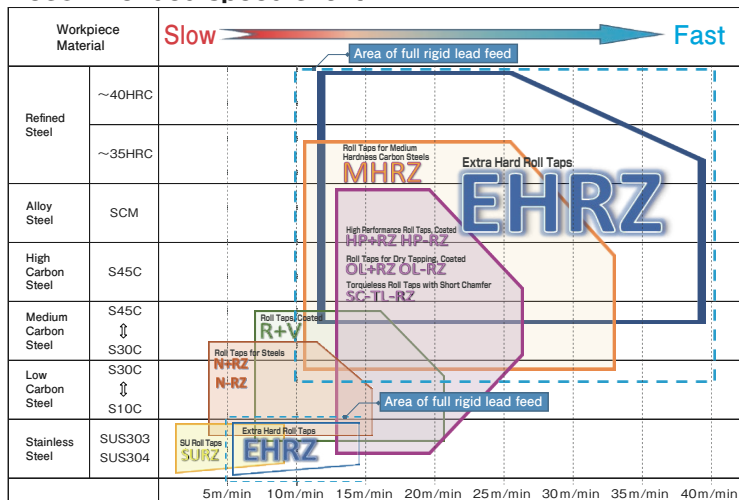
Diagram of torque at 360th hole tapped (N·cm)



Tap crest condition at 360th hole tapped



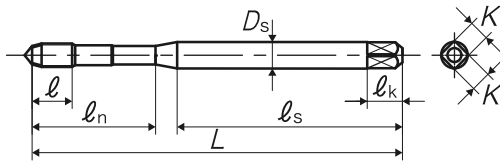
Recommended speed chart



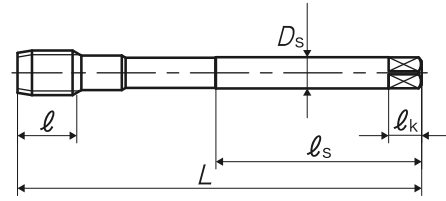
Think threads with
YAMAWA

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

TYPE:1



TYPE:2



Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M6 × 1	G8	1120101055	4P	80	11	30	45	6	4.5	7	5	1	¥ 4,950
M6 × 1	G8	1121101055	2P	80	11	30	45	6	4.5	7	5	1	¥ 4,950
M8 × 1.25	G8	1120101064	4P	90	12	-	46	6.2	5	8	6	2	¥ 6,690
M8 × 1.25	G8	1121101064	2P	90	12	-	46	6.2	5	8	6	2	¥ 6,690
M8 × 1	G8	1120101065	4P	90	12	-	46	6.2	5	8	6	2	¥ 7,360
M8 × 1	G8	1121101065	2P	90	12	-	46	6.2	5	8	6	2	¥ 7,360
M10 × 1.5	G8	1120101078	4P	100	13	-	51	7	5.5	8	8	2	¥ 8,300
M10 × 1.5	G8	1121101078	2P	100	13	-	51	7	5.5	8	8	2	¥ 8,300
M10 × 1.25	G8	1120101079	4P	100	13	-	51	7	5.5	8	8	2	¥ 8,300
M10 × 1.25	G8	1121101079	2P	100	13	-	51	7	5.5	8	8	2	¥ 8,300
M10 × 1	G8	1120101080	4P	100	13	-	51	7	5.5	8	8	2	¥ 9,130
M10 × 1	G8	1121101080	2P	100	13	-	51	7	5.5	8	8	2	¥ 9,130
M12 × 1.75	G8	1120101088	4P	110	15	-	56	8.5	6.5	9	8	2	¥ 11,700
M12 × 1.75	G8	1121101088	2P	110	15	-	56	8.5	6.5	9	8	2	¥ 11,700
M12 × 1.5	G8	1120101089	4P	110	15	-	56	8.5	6.5	9	8	2	¥ 11,700
M12 × 1.5	G8	1121101089	2P	110	15	-	56	8.5	6.5	9	8	2	¥ 11,700
M12 × 1.25	G8	1120101090	4P	110	15	-	56	8.5	6.5	9	8	2	¥ 11,700
M12 × 1.25	G8	1121101090	2P	110	15	-	56	8.5	6.5	9	8	2	¥ 11,700
M12 × 1	G8	1120101091	4P	110	15	-	56	8.5	6.5	9	8	2	¥ 13,500
M12 × 1	G8	1121101091	2P	110	15	-	56	8.5	6.5	9	8	2	¥ 13,500
M14 × 2	G10	1120101100	4P	110	18	-	56	10.5	8	11	8	2	¥ 16,500
M14 × 2	G10	1121101100	2P	110	18	-	56	10.5	8	11	8	2	¥ 16,500
M14 × 1.5	G9	1120101102	4P	110	18	-	56	10.5	8	11	8	2	¥ 16,500
M14 × 1.5	G9	1121101102	2P	110	18	-	56	10.5	8	11	8	2	¥ 16,500
M14 × 1.25	G9	1120101103	4P	110	18	-	56	10.5	8	11	8	2	¥ 19,800
M14 × 1.25	G9	1121101103	2P	110	18	-	56	10.5	8	11	8	2	¥ 19,800
M16 × 2	G10	1120101114	4P	110	18	-	56	12.5	10	13	8	2	¥ 20,400
M16 × 2	G10	1121101114	2P	110	18	-	56	12.5	10	13	8	2	¥ 20,400
M16 × 1.5	G9	1120101116	4P	110	18	-	56	12.5	10	13	8	2	¥ 20,400
M16 × 1.5	G9	1121101116	2P	110	18	-	56	12.5	10	13	8	2	¥ 20,400

Number of oil grooves: M6 = 5, M8 = 6, M10 and larger = 8

For M6 and smaller, external centers of 2 thread chamfer taps are removed.

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

⑥-4

⑥ Roll Tap Series

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

⑥-5

JIS

Z-PRO
MHRZ

Z-PRO

Roll Taps for Medium Hardness Carbon Steels



Specification



Tapping Speeds depending on Materials

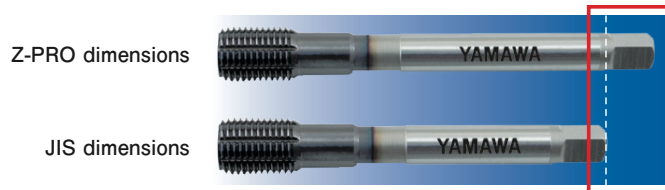
Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼	Thermal refined steels 調質鋼
10~30 (m/min)	10~30 (m/min)	10~30 (m/min)	10~20 (m/min)
			25~35HRC

Product Features

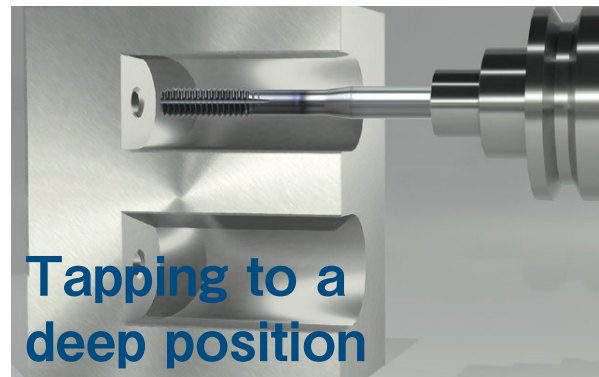
- Torque reduction is achieved from the new design and specifications.
- Tool life is dramatically improved with superb tool materials and coatings offering excellent wear resistance.
- Stable screw thread tapping in thermal refined material up to 35 HRC.
- The MHRZ roll taps can be used with water soluble cutting fluid.

Benefits of Z-PRO dimensions

- A longer overall length enables a better supply of cutting fluid, resulting in excellent finish of internal threads.

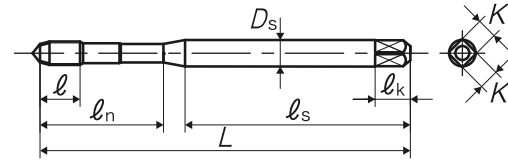


- Secures appropriate tool projection length to prevent interference with workpieces

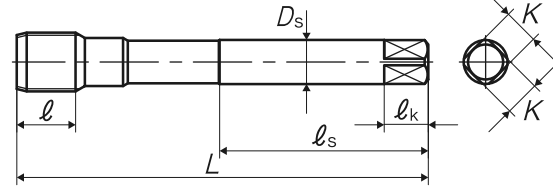


Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓ	ℓ_n	ℓ_s	Ds	K	ℓ_k

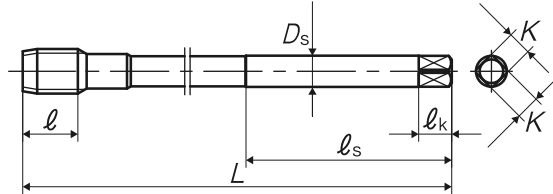
TYPE: 1



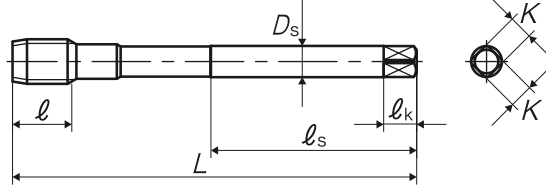
TYPE: 3



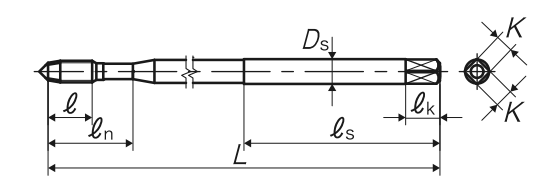
TYPE: 5



TYPE: 2



TYPE: 4



Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M6 × 1	G8	1110101055	4P	80	11	30	45	6	4.5	7	5	1	¥ 4,950
M6 × 1	G8	1111101055	2P	80	11	30	45	6	4.5	7	5	1	¥ 4,950
M8 × 1.25	G8	1110101064	4P	90	12	-	46	6.2	5	8	6	2	¥ 6,690
M8 × 1.25	G8	1111101064	2P	90	12	-	46	6.2	5	8	6	2	¥ 6,690
M10 × 1.5	G8	1110101078	4P	100	13	-	51	7	5.5	8	8	2	¥ 8,300
M10 × 1.5	G8	1111101078	2P	100	13	-	51	7	5.5	8	8	2	¥ 8,300
M10 × 1.25	G8	1110101079	4P	100	13	-	51	7	5.5	8	8	2	¥ 8,300
M10 × 1.25	G8	1111101079	2P	100	13	-	51	7	5.5	8	8	2	¥ 8,300
M12 × 1.75	G8	1110101088	4P	110	15	-	56	8.5	6.5	9	8	2	¥ 11,700
M12 × 1.75	G8	1111101088	2P	110	15	-	56	8.5	6.5	9	8	2	¥ 11,700
M12 × 1.5	G8	1110101089	4P	110	15	-	56	8.5	6.5	9	8	2	¥ 11,700
M12 × 1.5	G8	1111101089	2P	110	15	-	56	8.5	6.5	9	8	2	¥ 11,700
M12 × 1.25	G8	1110101090	4P	110	15	-	56	8.5	6.5	9	8	2	¥ 11,700
M12 × 1.25	G8	1111101090	2P	110	15	-	56	8.5	6.5	9	8	2	¥ 11,700
M14 × 1.5	G9	1110101102	4P	110	18	-	56	10.5	8	11	8	2	¥ 15,900
M14 × 1.5	G9	1111101102	2P	110	18	-	56	10.5	8	11	8	2	¥ 15,900
M16 × 1.5	G9	1110101116	4P	110	18	-	56	12.5	10	13	8	2	¥ 19,700
M16 × 1.5	G9	1111101116	2P	110	18	-	56	12.5	10	13	8	2	¥ 19,700
M18 × 1.5	G10	1110101130	4P	125	20	-	64	14	11	14	8	2	¥ 27,000
M18 × 1.5	G10	1111101130	2P	125	20	-	64	14	11	14	8	2	¥ 27,000
M20 × 1.5	G10	1110101144	4P	140	20	-	71	15	12	15	8	3	¥ 35,800
M20 × 1.5	G10	1111101144	2P	140	20	-	71	15	12	15	8	3	¥ 35,800
For Long Metric Threads													
M6 × 1	G8	2110101055	4P	100	11	30	45	6	4.5	7	5	4	¥ 6,560
M6 × 1	G8	2310101055	4P	150	11	30	45	6	4.5	7	5	4	¥ 9,210
M6 × 1	G8	2111101055	2P	100	11	30	45	6	4.5	7	5	4	¥ 6,560
M6 × 1	G8	2311101055	2P	150	11	30	45	6	4.5	7	5	4	¥ 9,210

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 ToolsPrecision Machinery/
Medical Surgical Instruments

JIS

⑥-6

⑥ Roll Tap Series

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

MHRZ Z-PRO Roll Taps for Medium Hardness Carbon Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
M8 × 1.25	G8	2110101064	4P	150	12	-	46	6.2	5	8	6	5	¥ 11,400
M8 × 1.25	G8	2111101064	2P	150	12	-	46	6.2	5	8	6	5	¥ 11,400
M10 × 1.5	G8	2110101078	4P	150	13	-	51	7	5.5	8	8	5	¥ 13,400
M10 × 1.5	G8	2111101078	2P	150	13	-	51	7	5.5	8	8	5	¥ 13,400
M10 × 1.25	G8	2110101079	4P	150	13	-	51	7	5.5	8	8	5	¥ 13,400
M10 × 1.25	G8	2111101079	2P	150	13	-	51	7	5.5	8	8	5	¥ 13,400
M12 × 1.75	G8	2110101088	4P	150	15	-	56	8.5	6.5	9	8	5	¥ 15,900
M12 × 1.75	G8	2111101088	2P	150	15	-	56	8.5	6.5	9	8	5	¥ 15,900
M12 × 1.5	G8	2110101089	4P	150	15	-	56	8.5	6.5	9	8	5	¥ 15,900
M12 × 1.5	G8	2111101089	2P	150	15	-	56	8.5	6.5	9	8	5	¥ 15,900
M12 × 1.25	G8	2110101090	4P	150	15	-	56	8.5	6.5	9	8	5	¥ 15,900
M12 × 1.25	G8	2111101090	2P	150	15	-	56	8.5	6.5	9	8	5	¥ 15,900
M14 × 1.5	G9	2110101102	4P	150	18	-	56	10.5	8	11	8	5	¥ 21,200
M14 × 1.5	G9	2111101102	2P	150	18	-	56	10.5	8	11	8	5	¥ 21,200
M16 × 1.5	G9	2110101116	4P	150	18	-	56	12.5	10	13	8	5	¥ 23,300
M16 × 1.5	G9	2111101116	2P	150	18	-	56	12.5	10	13	8	5	¥ 23,300

Number of oil grooves: M6 = 5, M8 = 6, M10 and larger = 8

For M6 and smaller, external centers of 2 thread chamfer taps are removed.

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

⑥-7

Think threads with
YAMAWA

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

⑥ Roll Tap Series

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

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

MHRZ-J

Roll Taps for Medium Hardness Carbon Steels



Specification



Tapping Speeds depending on Materials

Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼	Thermal refined steels 調質鋼
10~30 (m/min)	10~30 (m/min)	10~30 (m/min)	10~20 (m/min)
			25~35HRC

Product Features

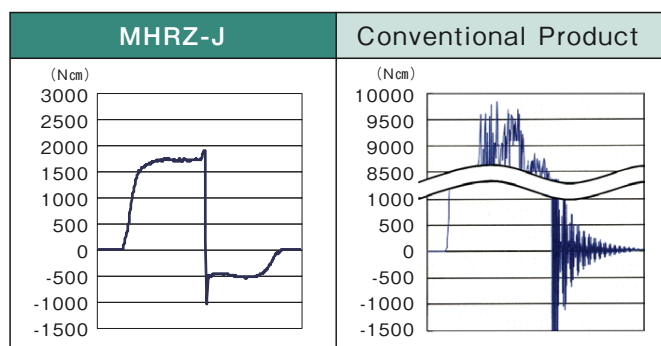
- Torque reduction is achieved from the new design and specifications.
- Tool life is dramatically improved with superb tool materials and coatings offering excellent wear resistance.
- Stable screw thread tapping in thermal refined material up to 35 HRC.
- The MHRZ-J roll taps can be used with water soluble cutting fluid.

Tapping Data

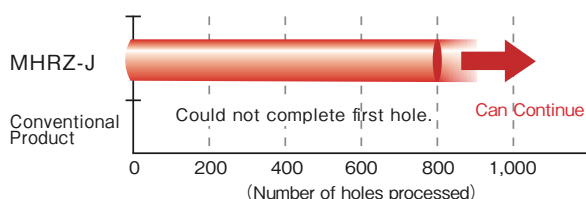
Tapping Conditions [M12×1.5]

Workpiece Material	SCM440/35HRC
Bored Hole Size	φ11.3
Tapping Length	18mm through hole
Tapping Speed	20m/min
Machinery Type	MC (perfect synchronous feed)
Tapping Fluid	Water soluble cutting fluid

Comparison of tapping torque

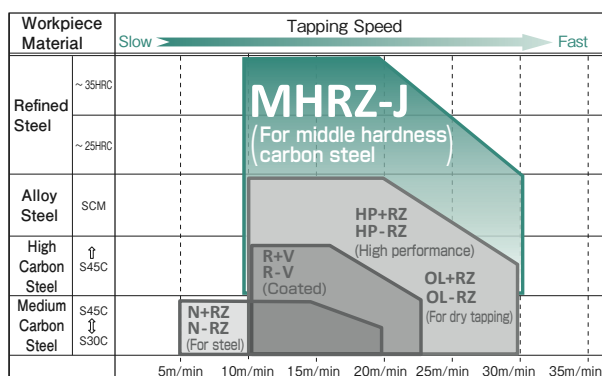


Comparison chart for the number of holes processed



The tapping torque is high, and stable internal screw thread roll form tapping is possible even for SCM 440 (refining) with a hardness of 35 HRC. This material hardness was thought to be difficult with roll tap in the past, but how it is possible.

Recommended speed chart



Troubleshooting!



◆ Eliminate problem of tangled chip by using roll taps!



◆ Thread surface finish improvement!

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

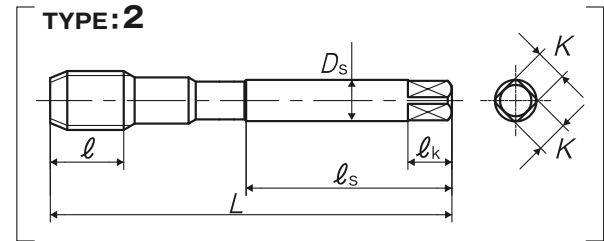
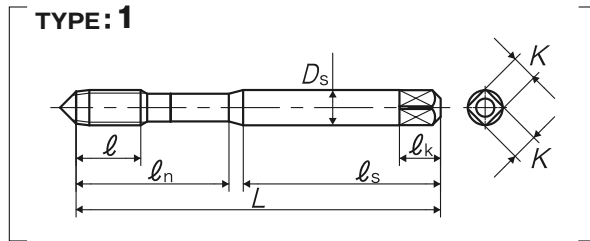


JIS

⑥-9

Think threads with
YAMAWA

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



Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M6 × 1	G8	RY6.0M8OCTP	4P	62	11	26	33	6	4.5	7	5	1	¥ 4,510
M6 × 1	G8	RY6.0M8OCTB	2P	62	11	26	33	6	4.5	7	5	1	¥ 4,510
M8 × 1.25	G8	RY8.0N8OCTP	4P	70	12	-	36	6.2	5	8	6	2	¥ 6,120
M8 × 1.25	G8	RY8.0N8OCTB	2P	70	12	-	36	6.2	5	8	6	2	¥ 6,120
M10 × 1.5	G8	RY010O8OCTP	4P	75	13	-	38	7	5.5	8	8	2	¥ 7,400
M10 × 1.5	G8	RY010O8OCTB	2P	75	13	-	38	7	5.5	8	8	2	¥ 7,400
M10 × 1.25	G8	RY010N8OCTP	4P	75	13	-	38	7	5.5	8	8	2	¥ 7,400
M10 × 1.25	G8	RY010N8OCTB	2P	75	13	-	38	7	5.5	8	8	2	¥ 7,400
M12 × 1.75	G8	RY012P8OCTP	4P	82	15	-	42	8.5	6.5	9	8	2	¥ 11,400
M12 × 1.75	G8	RY012P8OCTB	2P	82	15	-	42	8.5	6.5	9	8	2	¥ 11,400
M12 × 1.5	G8	RY012O8OCTP	4P	82	15	-	42	8.5	6.5	9	8	2	¥ 11,400
M12 × 1.5	G8	RY012O8OCTB	2P	82	15	-	42	8.5	6.5	9	8	2	¥ 11,400
M12 × 1.25	G8	RY012N8OCTP	4P	82	15	-	42	8.5	6.5	9	8	2	¥ 11,400
M12 × 1.25	G8	RY012N8OCTB	2P	82	15	-	42	8.5	6.5	9	8	2	¥ 11,400
M14 × 1.5	G9	RY014O9OCTP	4P	88	18	-	45	10.5	8	11	8	2	¥ 15,400
M14 × 1.5	G9	RY014O9OCTB	2P	88	18	-	45	10.5	8	11	8	2	¥ 15,400
M16 × 1.5	G9	RY016O9OCTP	4P	95	18	-	48	12.5	10	13	8	2	¥ 19,300
M16 × 1.5	G9	RY016O9OCTB	2P	95	18	-	48	12.5	10	13	8	2	¥ 19,300
M18 × 1.5	G10	RY018OOOCTP	4P	100	20	-	51	14	11	14	8	2	¥ 26,600
M18 × 1.5	G10	RY018OOOCTB	2P	100	20	-	51	14	11	14	8	2	¥ 26,600
M20 × 1.5	G10	RY020OOOCTP	4P	105	20	-	50	15	12	15	8	2	¥ 31,800
M20 × 1.5	G10	RY020OOOCTB	2P	105	20	-	50	15	12	15	8	2	¥ 31,800

Number of oil grooves: M6 = 5, M8 = 6, M10 and larger = 8

For M6 and smaller, external centers of 2 thread chamfer taps are removed.

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 ⑥-10

6 Roll Tap Series

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

ANSI

① Spiral Fluted Taps
(for blind hole)

② Spiral Fluted Taps
(for through hole)

③ Spiral Pointed Taps
(for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps
Simple Inspection tools

⑧ Pipe Taps

⑨ Thread Mills
Premium Thread Mills

⑩ Dies

⑪ Center Drills
Centering Tools

⑫ Precision Machinery/
Medical Surgical Instruments

ANSI

Z-PRO
MHRZ

Z-PRO

Roll Taps for Medium Hardness Carbon Steels



Specification

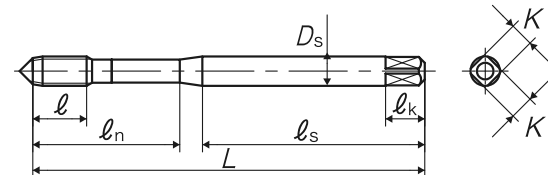


■ Suitable tapping in thermal refined steels (~35HRC).

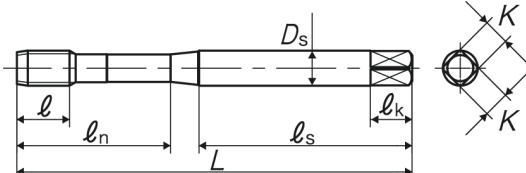
Tapping Speed depending on Materials

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
10~30 (m/min)	10~30 (m/min)	10~30 (m/min)	10~20 (m/min)
			25~35HRC

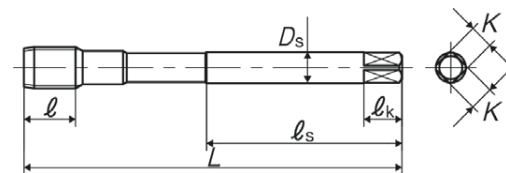
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1J

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	ℓ_s (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	Lobe	TYPE
For Unified Threads												
No.10-24UNC	H6	5110103039	4P	2.756	0.354	0.945	1.654	0.194	0.152	0.25	5	1
No.10-24UNC	H6	5111103039	2P	2.756	0.354	0.945	1.654	0.194	0.152	0.25	5	1
No.10-32UNF	H6	5110103041	4P	2.756	0.354	0.945	1.654	0.194	0.152	0.25	5	1
No.10-32UNF	H6	5111103041	2P	2.756	0.354	0.945	1.654	0.194	0.152	0.25	5	1
1/4-20UNC	H7	5110103058	4P	3.150	0.433	1.181	1.713	0.255	0.191	0.312	5	1
1/4-20UNC	H7	5111103058	2P	3.150	0.433	1.181	1.713	0.255	0.191	0.312	5	1
1/4-28UNF	H6	5110103062	4P	3.150	0.433	1.181	1.713	0.255	0.191	0.312	5	1
1/4-28UNF	H6	5111103062	2P	3.150	0.433	1.181	1.713	0.255	0.191	0.312	5	1
5/16-18UNC	H8	5110103071	4P	3.543	0.472	1.378	1.831	0.318	0.238	0.375	6	2
5/16-18UNC	H8	5111103071	2P	3.543	0.472	1.378	1.831	0.318	0.238	0.375	6	2
5/16-24UNF	H7	5110103074	4P	3.543	0.472	1.378	1.831	0.318	0.238	0.375	6	2
5/16-24UNF	H7	5111103074	2P	3.543	0.472	1.378	1.831	0.318	0.238	0.375	6	2
3/8-16UNC	H8	5110103082	4P	3.937	0.512	1.535	2.028	0.381	0.286	0.437	8	2
3/8-16UNC	H8	5111103082	2P	3.937	0.512	1.535	2.028	0.381	0.286	0.437	8	2
3/8-24UNF	H7	5110103085	4P	3.937	0.512	1.535	2.028	0.381	0.286	0.437	8	2
3/8-24UNF	H7	5111103085	2P	3.937	0.512	1.535	2.028	0.381	0.286	0.437	8	2
7/16-14UNC	H9	5110103098	4P	3.937	0.512	-	2.008	0.323	0.242	0.406	8	3

ANSI

⑥-11

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

6

ANSI

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	Lobe	TYPE
7/16-14UNC	H9	5111103098	2P	3.937	0.512	-	2.008	0.323	0.242	0.406	8	3
7/16-20UNF	H8	5110103101	4P	3.937	0.512	-	2.008	0.323	0.242	0.406	8	3
7/16-20UNF	H8	5111103101	2P	3.937	0.512	-	2.008	0.323	0.242	0.406	8	3
1/2-13UNC	H9	5110103111	4P	4.331	0.591	-	2.205	0.367	0.275	0.437	8	3
1/2-13UNC	H9	5111103111	2P	4.331	0.591	-	2.205	0.367	0.275	0.437	8	3
1/2-20UNF	H8	5110103115	4P	4.331	0.591	-	2.205	0.367	0.275	0.437	8	3
1/2-20UNF	H8	5111103115	2P	4.331	0.591	-	2.205	0.367	0.275	0.437	8	3
9/16-12UNC	H10	5110103126	4P	4.331	0.709	-	2.205	0.429	0.322	0.5	8	3
9/16-12UNC	H10	5111103126	2P	4.331	0.709	-	2.205	0.429	0.322	0.5	8	3
9/16-18UNF	H9	5110103129	4P	4.331	0.709	-	2.205	0.429	0.322	0.5	8	3
9/16-18UNF	H9	5111103129	2P	4.331	0.709	-	2.205	0.429	0.322	0.5	8	3

Number of oil grooves : 1/4 and smaller = 5, 5/16 = 6, 3/8 and larger = 8
For 1/4 and smaller, external centers of 2P chamfer taps are removed.

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

⑥-12

⑥ Roll Tap Series

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

⑥-13



Z-PRO

MHRZ

Z-PRO

Roll Taps for Medium Hardness Carbon Steels



Specification

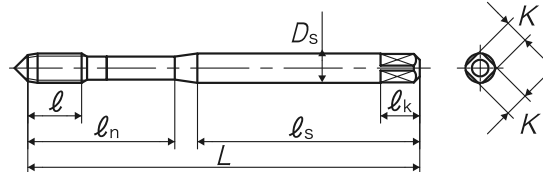


■ Suitable tapping in thermal refined steels
(~35HRC).

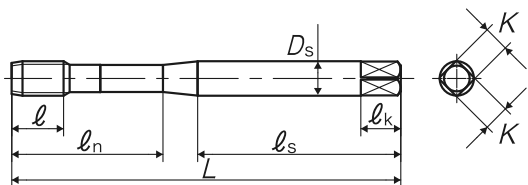
Tapping Speed depending on Materials

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
10~30 (m/min)	10~30 (m/min)	10~30 (m/min)	10~20 (m/min)
			25~35HRC

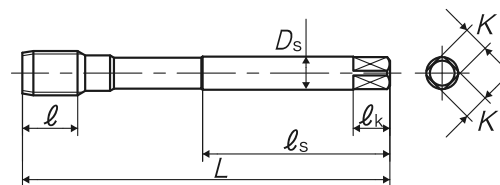
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1J

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	Lobe	TYPE
For Metric Threads												
M6 × 1	ISO2X	RD6.0MBOCTP	4P	80	11	30	45	6	4.9	8	5	1
M6 × 1	ISO2X	RD6.0MBOCTB	2P	80	11	30	45	6	4.9	8	5	1
M8 × 1.25	ISO2X	RD8.0NBOCTP	4P	90	12	35	47	8	6.2	9	6	2
M8 × 1.25	ISO2X	RD8.0NBOCTB	2P	90	12	35	47	8	6.2	9	6	2
M10 × 1.5	ISO2X	RD10.0BOCTP	4P	100	13	39	52.5	10	8	11	8	2
M10 × 1.5	ISO2X	RD10.0BOCTB	2P	100	13	39	52.5	10	8	11	8	2
M10 × 1.25	ISO2X	RM010NBOCTP	4P	100	13	-	51	7	5.5	8	8	3
M10 × 1.25	ISO2X	RM010NBOCTB	2P	100	13	-	51	7	5.5	8	8	3
M10 × 1	ISO2X	RM010MBOCTP	D(4P)	90	13	-	46	7	5.5	8	8	3
M10 × 1	ISO2X	RM010MBOCTB	C(2P)	90	13	-	46	7	5.5	8	8	3
M12 × 1.75	ISO2X	RG012PBOCTP	4P	110	15	-	56	9	7	10	8	3
M12 × 1.75	ISO2X	RG012PBOCTB	2P	110	15	-	56	9	7	10	8	3
M12 × 1.5	ISO2X	RM012OBOCTP	4P	100	15	-	51	9	7	10	8	3
M12 × 1.5	ISO2X	RM012OBOCTB	2P	100	15	-	51	9	7	10	8	3
M12 × 1.25	ISO2X	RM012NBOCTP	4P	100	15	-	51	9	7	10	8	3
M12 × 1.25	ISO2X	RM012NBOCTB	2P	100	15	-	51	9	7	10	8	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	ℓ_n	ℓ_s	Ds	K	ℓ_k

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE
M14 × 2	ISO2X	RG014QBOCTP	D(4P)	110	18	-	56	11	9	12	8	3
M14 × 2	ISO2X	RG014QBOCTB	C(2P)	110	18	-	56	11	9	12	8	3
M14 × 1.5	ISO2X	RM014OBOCTP	4P	100	18	-	51	11	9	12	8	3
M14 × 1.5	ISO2X	RM014OBOCTB	2P	100	18	-	51	11	9	12	8	3
M14 × 1.25	ISO2X	RM014NBOCTP	D(4P)	100	18	-	51	11	9	12	8	3
M14 × 1.25	ISO2X	RM014NBOCTB	C(2P)	100	18	-	51	11	9	12	8	3
M16 × 2	ISO2X	RG016QBOCTP	D(4P)	110	18	-	56	12	9	12	8	3
M16 × 2	ISO2X	RG016QBOCTB	C(2P)	110	18	-	56	12	9	12	8	3
M16 × 1.5	ISO2X	RM016OBOCTP	4P	100	18	-	51	12	9	12	8	3
M16 × 1.5	ISO2X	RM016OBOCTB	2P	100	18	-	51	12	9	12	8	3
M18 × 1.5	ISO2X	RM018OBOCTP	4P	110	20	-	56	14	11	14	8	3
M18 × 1.5	ISO2X	RM018OBOCTB	2P	110	20	-	56	14	11	14	8	3
M20 × 1.5	ISO2X	RM020OBOCTP	4P	125	20	-	64	16	12	15	8	3
M20 × 1.5	ISO2X	RM020OBOCTB	2P	125	20	-	64	16	12	15	8	3

Number of oil grooves: M6 = 5, M8 = 6, M10 and larger = 8

For M6 and smaller, external centers of 2 thread chamfer taps are removed.

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

⑥-14

⑥ Roll Tap Series

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

N+RZ N-RZ

Roll Taps for Steels

Specification

HSS

OX
Oxide

2~4

Tapping Speeds depending on Materials

Low carbon steels
低炭素鋼
5~15
(m/min)

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

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

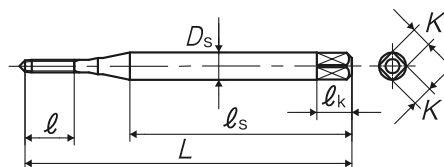


■N+RZ/N-RZ are the forming taps suitable for ferrous materials such as carbon steels, alloy steels, and normal steels.

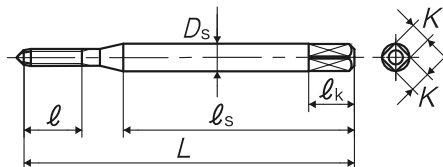
•Product symbol is distinguished depend on the size.

N+RZ	~M6 (coarse thread)
N-RZ	~M6 (fine threads), M7 ~ , all U, all

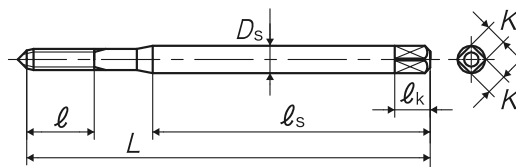
TYPE:1



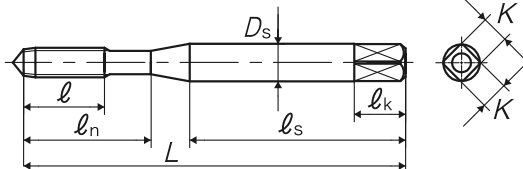
TYPE:2



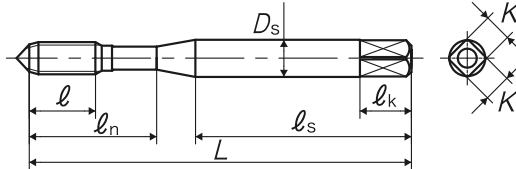
TYPE:3



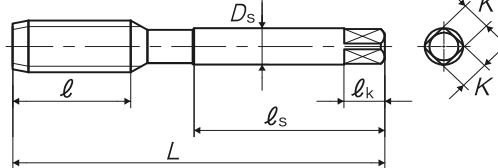
TYPE:4



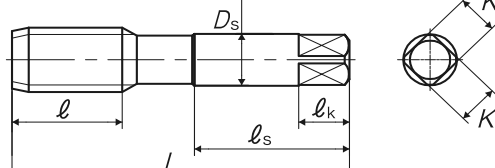
TYPE:5



TYPE:6



TYPE:7



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

6

JIS

N+RZ Roll Taps for Steels

Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M1 × 0.25	G4	NRZP41.0BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060
M1 × 0.25	G4	NRZP41.0BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060
M1 × 0.25	G5	NRZP51.0BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060 ※
M1 × 0.25	G5	NRZP51.0BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060 ※
M1.2 × 0.25	G4	NRZP41.2BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060
M1.2 × 0.25	G4	NRZP41.2BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060
M1.2 × 0.25	G5	NRZP51.2BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060 ※
M1.2 × 0.25	G5	NRZP51.2BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060 ※
M1.4 × 0.3	G4	NRZP41.4CP	4P	36	5.4	-	24	3	2.5	5	4	1	¥ 3,320
M1.4 × 0.3	G4	NRZP41.4CB	2P	36	5.4	-	24	3	2.5	5	4	1	¥ 3,320
M1.4 × 0.3	G5	NRZP51.4CP	4P	36	5.4	-	24	3	2.5	5	4	1	¥ 3,320
M1.4 × 0.3	G5	NRZP51.4CB	2P	36	5.4	-	24	3	2.5	5	4	1	¥ 3,320
M1.6 × 0.35	G4	NRZP41.6DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.6 × 0.35	G4	NRZP41.6DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.6 × 0.35	G5	NRZP51.6DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.6 × 0.35	G5	NRZP51.6DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.7 × 0.35	G4	NRZP41.7DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.7 × 0.35	G4	NRZP41.7DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.7 × 0.35	G5	NRZP51.7DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.7 × 0.35	G5	NRZP51.7DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.7 × 0.35	G6	NRZP61.7DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.7 × 0.35	G6	NRZP61.7DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.8 × 0.35	G4	NRZP41.8DP	4P	42	6.3	-	27	3	2.5	5	4	2	¥ 3,170 ※
M1.8 × 0.35	G4	NRZP41.8DB	2P	42	6.3	-	27	3	2.5	5	4	2	¥ 3,170 ※
M1.8 × 0.35	G5	NRZP51.8DP	4P	42	6.3	-	27	3	2.5	5	4	2	¥ 3,170 ※
M1.8 × 0.35	G5	NRZP51.8DB	2P	42	6.3	-	27	3	2.5	5	4	2	¥ 3,170 ※
M2 × 0.4	G4	NRZP42.0EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,570
M2 × 0.4	G4	NRZP42.0EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,570
M2 × 0.4	G5	NRZP52.0EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,570
M2 × 0.4	G5	NRZP52.0EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,570
M2 × 0.4	G6	NRZP62.0EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,570
M2 × 0.4	G6	NRZP62.0EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,570
M2.2 × 0.45	G5	NRZP52.2FP	4P	42	8.1	-	27	3	2.5	5	4	3	¥ 2,310 ※
M2.2 × 0.45	G5	NRZP52.2FB	2P	42	8.1	-	27	3	2.5	5	4	3	¥ 2,310 ※
M2.3 × 0.4	G4	NRZP42.3EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,310 ※
M2.3 × 0.4	G4	NRZP42.3EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,310 ※
M2.3 × 0.4	G5	NRZP52.3EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,310 ※
M2.3 × 0.4	G5	NRZP52.3EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,310 ※
M2.3 × 0.4	G6	NRZP62.3EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,310 ※
M2.3 × 0.4	G6	NRZP62.3EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,310 ※
M2.5 × 0.45	G5	NRZP52.5FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M2.5 × 0.45	G5	NRZP52.5FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M2.5 × 0.45	G6	NRZP62.5FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M2.5 × 0.45	G6	NRZP62.5FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M2.6 × 0.45	G5	NRZP52.6FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M2.6 × 0.45	G5	NRZP52.6FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960

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

⑥-16

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

6 Roll Tap Series

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

N+RZ Roll Taps for Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
M2.6 × 0.45	G6	NRZP62.6FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M2.6 × 0.45	G6	NRZP62.6FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M3 × 0.5	G5	NRZP53.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 1,790
M3 × 0.5	G5	NRZP53.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 1,790
M3 × 0.5	G6	NRZP63.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 1,790
M3 × 0.5	G6	NRZP63.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 1,790
M3 × 0.5	G7	NRZP73.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 1,790
M3 × 0.5	G7	NRZP73.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 1,790
M3 × 0.5	G8	NRZP83.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 1,790 ※
M3 × 0.5	G8	NRZP83.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 1,790 ※
M3.5 × 0.6	G5	NRZP53.5HP	4P	52	11	16	29	5	4	7	4	4	¥ 1,790
M3.5 × 0.6	G5	NRZP53.5HB	2P	52	11	16	29	5	4	7	4	4	¥ 1,790
M3.5 × 0.6	G6	NRZP63.5HP	4P	52	11	16	29	5	4	7	4	4	¥ 1,790
M3.5 × 0.6	G6	NRZP63.5HB	2P	52	11	16	29	5	4	7	4	4	¥ 1,790
M3.5 × 0.6	G7	NRZP73.5HP	4P	52	11	16	29	5	4	7	4	4	¥ 1,790 ※
M3.5 × 0.6	G7	NRZP73.5HB	2P	52	11	16	29	5	4	7	4	4	¥ 1,790 ※
M4 × 0.7	G5	NRZP54.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 1,790
M4 × 0.7	G5	NRZP54.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 1,790
M4 × 0.7	G6	NRZP64.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 1,790
M4 × 0.7	G6	NRZP64.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 1,790
M4 × 0.7	G7	NRZP74.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 1,790
M4 × 0.7	G7	NRZP74.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 1,790
M4 × 0.7	G8	NRZP84.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 1,790 ※
M4 × 0.7	G8	NRZP84.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 1,790 ※
M5 × 0.8	G5	NRZP55.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,800 ※
M5 × 0.8	G5	NRZP55.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,800 ※
M5 × 0.8	G6	NRZP65.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,800
M5 × 0.8	G6	NRZP65.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,800
M5 × 0.8	G7	NRZP75.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,800
M5 × 0.8	G7	NRZP75.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,800
M5 × 0.8	G8	NRZP85.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,800 ※
M5 × 0.8	G8	NRZP85.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,800 ※
M6 × 1	G5	NRZP56.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 1,950 ※
M6 × 1	G5	NRZP56.0MB	2P	62	15	26	33	6	4.5	7	4	4	¥ 1,950 ※
M6 × 1	G6	NRZP66.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 1,950
M6 × 1	G6	NRZP66.0MB	2P	62	15	26	33	6	4.5	7	4	4	¥ 1,950
M6 × 1	G7	NRZP76.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 1,950
M6 × 1	G7	NRZP76.0MB	2P	62	15	26	33	6	4.5	7	4	4	¥ 1,950
M6 × 1	G8	NRZP86.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 1,950 ※
M6 × 1	G8	NRZP86.0MB	2P	62	15	26	33	6	4.5	7	4	4	¥ 1,950 ※

N-RZ Roll Taps for Steels

Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M2 × 0.25	G4	NRZM42.0BP	4P	42	4.5	-	27	3	2.5	5	4	3	¥ 3,900 ※
M2 × 0.25	G4	NRZM42.0BB	2P	42	4.5	-	27	3	2.5	5	4	3	¥ 3,900 ※
M2 × 0.25	G5	NRZM52.0BP	4P	42	4.5	-	27	3	2.5	5	4	3	¥ 3,900 ※
M2 × 0.25	G5	NRZM52.0BB	2P	42	4.5	-	27	3	2.5	5	4	3	¥ 3,900 ※

JIS

⑥-17

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

6

JIS

N-RZ Roll Taps for Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
M2.5 × 0.35	G5	NRZM52.5DP	4P	46	6.3	14	29	3	2.5	5	4	5	¥ 2,890 ※
M2.5 × 0.35	G5	NRZM52.5DB	2P	46	6.3	14	29	3	2.5	5	4	5	¥ 2,890 ※
M2.6 × 0.35	G5	NRZM52.6DP	4P	46	6.3	14	29	3	2.5	5	4	5	¥ 2,890 ※
M2.6 × 0.35	G5	NRZM52.6DB	2P	46	6.3	14	29	3	2.5	5	4	5	¥ 2,890 ※
M3 × 0.35	G5	NRZM53.0DP	4P	46	6.5	14	26	4	3.2	6	4	5	¥ 3,020 ※
M3 × 0.35	G5	NRZM53.0DB	2P	46	6.5	14	26	4	3.2	6	4	5	¥ 3,020 ※
M4 × 0.5	G5	NRZM54.0GP	4P	52	9	17	29	5	4	7	4	5	¥ 2,600 ※
M4 × 0.5	G5	NRZM54.0GB	2P	52	9	17	29	5	4	7	4	5	¥ 2,600 ※
M4 × 0.5	G6	NRZM64.0GP	4P	52	9	17	29	5	4	7	4	5	¥ 2,600 ※
M4 × 0.5	G6	NRZM64.0GB	2P	52	9	17	29	5	4	7	4	5	¥ 2,600 ※
M4 × 0.5	G7	NRZM74.0GB	2P	52	9	17	29	5	4	7	4	5	¥ 2,600 ※
M5 × 0.5	G6	NRZM65.0GP	4P	60	9	22	33	5.5	4.5	7	4	5	¥ 2,600 ※
M5 × 0.5	G6	NRZM65.0GB	2P	60	9	22	33	5.5	4.5	7	4	5	¥ 2,600 ※
M6 × 0.75	G6	NRZM66.0JP	4P	62	15	26	33	6	4.5	7	4	4	¥ 2,770 ※
M6 × 0.75	G6	NRZM66.0JB	2P	62	15	26	33	6	4.5	7	4	4	¥ 2,770 ※
M6 × 0.75	G7	NRZM76.0JP	4P	62	15	26	33	6	4.5	7	4	4	¥ 2,770 ※
M6 × 0.75	G7	NRZM76.0JB	2P	62	15	26	33	6	4.5	7	4	4	¥ 2,770 ※
M6 × 0.5	G6	NRZM66.0GP	4P	62	9	26	33	6	4.5	7	4	5	¥ 2,770 ※
M6 × 0.5	G6	NRZM66.0GB	2P	62	9	26	33	6	4.5	7	4	5	¥ 2,770 ※
M7 × 1	G7	NRZM77.0MP	4P	70	19	-	36	6.2	5	8	4	6	¥ 2,460 ※
M7 × 1	G7	NRZM77.0MB	2P	70	19	-	36	6.2	5	8	4	6	¥ 2,460 ※
M7 × 0.75	G7	NRZM77.0JP	4P	70	19	-	36	6.2	5	8	4	6	¥ 3,640 ※
M7 × 0.75	G7	NRZM77.0JB	2P	70	19	-	36	6.2	5	8	4	6	¥ 3,640 ※
M8 × 1.25	G7	NRZM78.0NP	4P	70	19	-	36	6.2	5	8	6	6	¥ 2,830
M8 × 1.25	G7	NRZM78.0NB	2P	70	19	-	36	6.2	5	8	6	6	¥ 2,830
M8 × 1.25	G8	NRZM88.0NP	4P	70	19	-	36	6.2	5	8	6	6	¥ 2,830 ※
M8 × 1.25	G8	NRZM88.0NB	2P	70	19	-	36	6.2	5	8	6	6	¥ 2,830 ※
M8 × 1	G7	NRZM78.0MP	4P	70	19	-	36	6.2	5	8	6	6	¥ 3,230 ※
M8 × 1	G7	NRZM78.0MB	2P	70	19	-	36	6.2	5	8	6	6	¥ 3,230 ※
M8 × 0.75	G7	NRZM78.0JP	4P	70	19	-	36	6.2	5	8	6	6	¥ 3,640 ※
M8 × 0.75	G7	NRZM78.0JB	2P	70	19	-	36	6.2	5	8	6	6	¥ 3,640 ※
M10 × 1.5	G7	NRZM7010OP	4P	75	23	-	38	7	5.5	8	8	6	¥ 3,600 ※
M10 × 1.5	G7	NRZM7010OB	2P	75	23	-	38	7	5.5	8	8	6	¥ 3,600 ※
M10 × 1.5	G8	NRZM8010OP	4P	75	23	-	38	7	5.5	8	8	6	¥ 3,600 ※
M10 × 1.5	G8	NRZM8010OB	2P	75	23	-	38	7	5.5	8	8	6	¥ 3,600 ※
M10 × 1.25	G7	NRZM7010NP	4P	75	23	-	38	7	5.5	8	8	6	¥ 3,600 ※
M10 × 1.25	G7	NRZM7010NB	2P	75	23	-	38	7	5.5	8	8	6	¥ 3,600 ※
M10 × 1.25	G8	NRZM8010NP	4P	75	23	-	38	7	5.5	8	8	6	¥ 3,600 ※
M10 × 1.25	G8	NRZM8010NB	2P	75	23	-	38	7	5.5	8	8	6	¥ 3,600 ※
M10 × 1	G7	NRZM7010MP	4P	75	23	-	38	7	5.5	8	8	6	¥ 4,290 ※
M10 × 1	G7	NRZM7010MB	2P	75	23	-	38	7	5.5	8	8	6	¥ 4,290 ※
M12 × 1.75	G8	NRZM8012PP	4P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,120 ※
M12 × 1.75	G8	NRZM8012PB	2P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,120 ※
M12 × 1.75	G9	NRZM9012PP	4P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,120 ※
M12 × 1.75	G9	NRZM9012PB	2P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,120 ※
M12 × 1.5	G8	NRZM8012OP	4P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,120 ※
M12 × 1.5	G8	NRZM8012OB	2P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,120 ※
M12 × 1.5	G9	NRZM9012OP	4P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,120 ※
M12 × 1.5	G9	NRZM9012OB	2P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,120 ※
M12 × 1.25	G8	NRZM8012NP	4P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,120 ※

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

⑥-18

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

⑥ Roll Tap Series

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

N-RZ Roll Taps for Steels

	Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
① Spiral Fluted Taps (for blind hole)	M12 × 1.25	G8	NRZM8012NB	2P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,120 ※
	M12 × 1.25	G9	NRZM9012NP	4P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,120 ※
	M12 × 1.25	G9	NRZM9012NB	2P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,120 ※
② Spiral Fluted Taps (for through hole)	M12 × 1	G7	NRZM7012MP	4P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,990 ※
	M12 × 1	G7	NRZM7012MB	2P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,990 ※
	M14 × 2	G9	NRZM9014QP	4P	88	26	-	45	10.5	8	11	8	6	¥ 6,990 ※
③ Spiral Pointed Taps (for through hole)	M14 × 2	G9	NRZM9014QB	2P	88	26	-	45	10.5	8	11	8	6	¥ 6,990 ※
	M14 × 2	G10	NRZM0014QP	4P	88	26	-	45	10.5	8	11	8	6	¥ 6,990 ※
	M14 × 2	G10	NRZM0014QB	2P	88	26	-	45	10.5	8	11	8	6	¥ 6,990 ※
④ Hand Taps	M14 × 1.5	G9	NRZM9014OP	4P	88	26	-	45	10.5	8	11	8	6	¥ 6,990 ※
	M14 × 1.5	G9	NRZM9014OB	2P	88	26	-	45	10.5	8	11	8	6	¥ 6,990 ※
	M14 × 1	G8	NRZM8014MP	4P	88	26	-	45	10.5	8	11	8	6	¥ 8,090 ※
⑤ Cemented Carbide Taps	M14 × 1	G8	NRZM8014MB	2P	88	26	-	45	10.5	8	11	8	6	¥ 8,090 ※
	M16 × 2	G9	NRZM9016QP	4P	95	26	-	48	12.5	10	13	8	6	¥ 9,310 ※
	M16 × 2	G9	NRZM9016QB	2P	95	26	-	48	12.5	10	13	8	6	¥ 9,310 ※
⑥ Roll Taps	M16 × 2	G10	NRZM0016QP	4P	95	26	-	48	12.5	10	13	8	6	¥ 9,310 ※
	M16 × 2	G10	NRZM0016QB	2P	95	26	-	48	12.5	10	13	8	6	¥ 9,310 ※
	M16 × 1.5	G9	NRZM9016OP	4P	95	26	-	48	12.5	10	13	8	6	¥ 9,310 ※
⑦ Special Thread Taps Simple Inspection Tools	M16 × 1.5	G9	NRZM9016OB	2P	95	26	-	48	12.5	10	13	8	6	¥ 9,310 ※
	M16 × 1	G8	NRZM8016MP	4P	95	26	-	48	12.5	10	13	8	6	¥ 11,200 ※
	M16 × 1	G8	NRZM8016MB	2P	95	26	-	48	12.5	10	13	8	6	¥ 11,200 ※
⑧ Pipe Taps	M18 × 1.5	G10	NRZM0018OP	4P	100	33	-	51	14	11	14	8	6	¥ 12,600 ※
	M20 × 1.5	G9	NRZM9020OP	4P	105	33	-	50	15	12	15	8	7	¥ 17,300 ※
	M20 × 1.5	G9	NRZM9020OB	2P	105	33	-	50	15	12	15	8	7	¥ 17,300 ※
⑨ Thread Mills Premium Thread Mills	M20 × 1.5	G10	NRZM0020OP	4P	105	33	-	50	15	12	15	8	7	¥ 17,300 ※
	M20 × 1.5	G10	NRZM0020OB	2P	105	33	-	50	15	12	15	8	7	¥ 17,300 ※
	For Unified Threads													
⑩ Dies	No.4-40UNC	G5	NRZM5UN4HB	2P	46	9	14	25	4	3.2	6	4	4	¥ 2,210 ※
	No.6-32UNC	G6	NRZM6UN6JB	2P	52	11	17	27	5	4	7	4	4	¥ 2,050 ※
	5/16-18UNC	G7	NRZM7U05OP	4P	70	19	-	36	6.2	5	8	6	6	¥ 3,270 ※
⑪ Center Drills Centering Tools	5/16-18UNC	G7	NRZM7U05OB	2P	70	19	-	36	6.2	5	8	6	6	¥ 3,270 ※
	3/8-24UNF	G7	NRZM7U06MP	4P	75	23	-	38	7	5.5	8	6	6	¥ 4,190 ※
	3/8-24UNF	G7	NRZM7U06MB	2P	75	23	-	38	7	5.5	8	6	6	¥ 4,190 ※
⑫ Precision Machinery/ Medical Surgical Instruments	7/16-14UNC	G8	NRZM8U07QP	4P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,880 ※
	7/16-14UNC	G8	NRZM8U07QB	2P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,880 ※
	7/16-20UNF	G8	NRZM8U07NP	4P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,880 ※
	7/16-20UNF	G8	NRZM8U07NB	2P	82	26	-	42	8.5	6.5	9	8	6	¥ 5,880 ※
	1/2-13UNC	G8	NRZM8U08RP	4P	88	26	-	45	10.5	8	11	8	6	¥ 6,230 ※
	1/2-13UNC	G8	NRZM8U08RB	2P	88	26	-	45	10.5	8	11	8	6	¥ 6,230 ※
	1/2-20UNF	G8	NRZM8U08NP	4P	88	26	-	45	10.5	8	11	8	6	¥ 6,230 ※
	1/2-20UNF	G8	NRZM8U08NB	2P	88	26	-	45	10.5	8	11	8	6	¥ 6,230 ※

Number of oil grooves : Metric thread : M2.6 and smaller=non,
M3~M7=4, M8=3, M10 and larger=4
For M4 and smaller, external centers of 2 thread chamfer taps are removed.
M5 to M6 taps with 2P chamfer have a center hole at the front end.

N-RZ

Roll Taps for Steels

Specification

HSS

OX
Oxide

2~4

Tapping Speed depending on Materials

Low carbon steels
低炭素鋼
5~15
(m/min)

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

■N-RZ is the forming tap suitable for ferrous materials such as carbon steels, alloy steels, and normal steels.



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

6

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

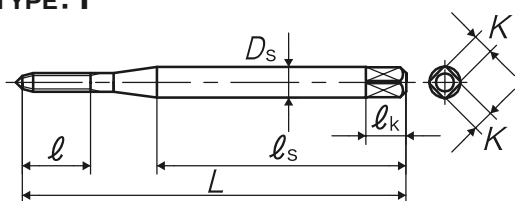
Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫

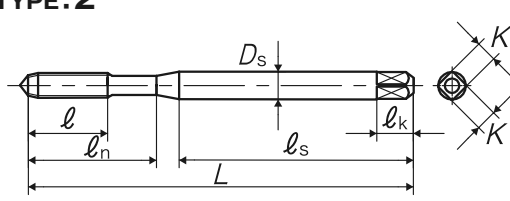
ANSI

⑥-20

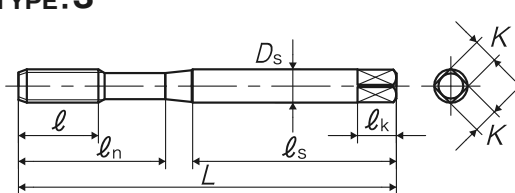
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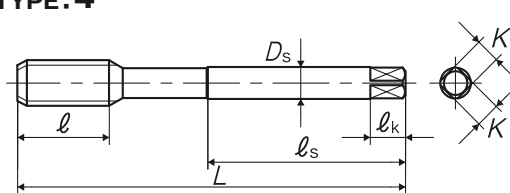
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TYPE:3



TYPE:4



Segment : 1J

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	Lobe	TYPE
For Metric Threads												
M3 × 0.5	D5	389513M	4P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
M3 × 0.5	D5	389512M	2P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
M3.5 × 0.6	D6	389515M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
M3.5 × 0.6	D6	389514M	2P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
M4 × 0.7	D6	389517M	4P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	4	2
M4 × 0.7	D6	389516M	2P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	4	2
M5 × 0.8	D7	389519M	4P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	4	2
M5 × 0.8	D7	389518M	2P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	4	2
M6 × 1	D8	389521M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
M6 × 1	D8	389520M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
M7 × 1	D9	389523M	4P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	4	3
M7 × 1	D9	389522M	2P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	4	3
M8 × 1.25	D9	389527M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
M8 × 1.25	D9	389526M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
M8 × 1	D9	389525M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
M8 × 1	D9	389524M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3

6 Roll Tap Series

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

N-RZ Roll Taps for Steels

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	Lobe	TYPE
M10 × 1.5	D10	389531M	4P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	8	3
M10 × 1.5	D10	389530M	2P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	8	3
M10 × 1.25	D9	389529M	4P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	8	3
M10 × 1.25	D9	389528M	2P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	8	3
M12 × 1.75	D11	389535M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
M12 × 1.75	D11	389534M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
M12 × 1.25	D9	389533M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
M12 × 1.25	D9	389532M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
For Unified Threads												
No.0-80UNF	H2	389410M	2P	1.772	0.236	-	1.161	0.141	0.11	0.187	3	1
No.1-64UNC	H2	389411M	2P	1.772	0.276	-	1.161	0.141	0.11	0.187	3	1
No.1-72UNF	H2	389412M	2P	1.772	0.276	-	1.161	0.141	0.11	0.187	3	1
No.2-56UNC	H2	389413M	2P	1.772	0.314	-	1.161	0.141	0.11	0.187	4	1
No.2-56UNC	H3	389414M	2P	1.772	0.314	-	1.161	0.141	0.11	0.187	4	1
No.2-64UNF	H2	389415M	2P	1.772	0.314	-	1.161	0.141	0.11	0.187	4	1
No.2-64UNF	H3	389416M	2P	1.772	0.314	-	1.161	0.141	0.11	0.187	4	1
No.3-48UNC	H2	389417M	2P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	4	2
No.3-48UNC	H3	389418M	2P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	4	2
No.3-56UNF	H2	389419M	2P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	4	2
No.3-56UNF	H3	389420M	2P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	4	2
No.4-40UNC	H3	389423M	4P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-40UNC	H3	389421M	2P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-40UNC	H5	389424M	4P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-40UNC	H5	389422M	2P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-48UNF	H3	389427M	4P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-48UNF	H3	389425M	2P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-48UNF	H5	389428M	4P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-48UNF	H5	389426M	2P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.5-40UNC	H3	389431M	4P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-40UNC	H3	389429M	2P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-40UNC	H5	389432M	4P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-40UNC	H5	389430M	2P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-44UNF	H3	389435M	4P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-44UNF	H3	389433M	2P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-44UNF	H5	389436M	4P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-44UNF	H5	389434M	2P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.6-32UNC	H3	389440M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-32UNC	H3	389437M	2P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-32UNC	H5	389441M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-32UNC	H5	389438M	2P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-40UNF	H3	389444M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-40UNF	H3	389442M	2P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-40UNF	H5	389445M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-40UNF	H5	389443M	2P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.8-32UNC	H3	389448M	4P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-32UNC	H3	389446M	2P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-32UNC	H5	389449M	4P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-32UNC	H5	389447M	2P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-36UNF	H3	389452M	4P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-36UNF	H3	389450M	2P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2

ANSI

⑥-21

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

6

ANSI

N-RZ Roll Taps for Steels

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	Lobe	TYPE
No.8-36UNF	H5	389453M	4P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-36UNF	H5	389451M	2P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.10-24UNC	H4	389456M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-24UNC	H4	389454M	2P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-24UNC	H6	389457M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-24UNC	H6	389455M	2P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-32UNF	H4	389460M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-32UNF	H4	389458M	2P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-32UNF	H6	389461M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-32UNF	H6	389459M	2P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.12-24UNC	H4	389464M	4P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
No.12-24UNC	H4	389462M	2P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
No.12-24UNC	H6	389465M	4P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
No.12-24UNC	H6	389463M	2P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
No.12-28UNF	H4	389468M	4P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
No.12-28UNF	H4	389466M	2P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
No.12-28UNF	H6	389469M	4P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
No.12-28UNF	H6	389467M	2P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
1/4-20UNC	H4	389472M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-20UNC	H4	389470M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-20UNC	H6	389473M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-20UNC	H6	389471M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-28UNF	H4	389476M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-28UNF	H4	389474M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-28UNF	H6	389477M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-28UNF	H6	389475M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
5/16-18UNC	H5	389480M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
5/16-18UNC	H5	389478M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
5/16-18UNC	H7	389481M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
5/16-18UNC	H7	389479M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
5/16-24UNF	H5	389484M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
5/16-24UNF	H5	389482M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
5/16-24UNF	H7	389485M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
5/16-24UNF	H7	389483M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
3/8-16UNC	H5	389488M	4P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-16UNC	H5	389486M	2P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-16UNC	H7	389489M	4P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-16UNC	H7	389487M	2P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-24UNF	H5	389492M	4P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-24UNF	H5	389490M	2P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-24UNF	H7	389493M	4P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-24UNF	H7	389491M	2P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
7/16-14UNC	H5	389496M	4P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-14UNC	H5	389494M	2P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-14UNC	H7	389497M	4P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-14UNC	H7	389495M	2P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-20UNF	H5	389502M	4P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-20UNF	H5	389498M	2P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-20UNF	H7	389503M	4P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-20UNF	H7	389499M	2P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	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

⑥-22

⑥ Roll Tap Series

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

N-RZ Roll Taps for Steels

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	Lobe	TYPE
1/2-13UNC	H5	389506M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-13UNC	H5	389504M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-13UNC	H7	389507M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-13UNC	H7	389505M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-20UNF	H5	389510M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-20UNF	H5	389508M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-20UNF	H7	389511M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-20UNF	H7	389509M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4

Number of oil grooves : Metric thread : M3~M7 = 4, M8 = 3, M10 and larger = 4
 Unified thread : No.4 and smaller = non, No.5~1/4 = 4, 5/16~3/8 = 3, 7/16 and larger = 4
 For M6, 1/4 and smaller with 2P chamfer, the external center is cut off.

- 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

N+RZ N-RZ

Roll Taps for Steels

Specification



Tapping Speeds depending on Materials

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

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



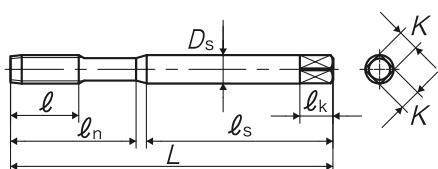
■N+RZ/N-RZ is the forming tap suitable for steel materials such as carbon steels, alloy steels, and stainless steels.

・Product symbol is distinguished depend on the size.

N+RZ	~ M6
N-RZ	M8 ~

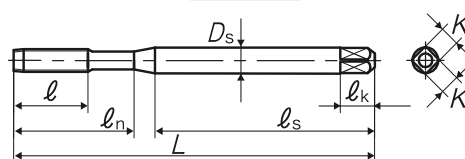
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DIN371



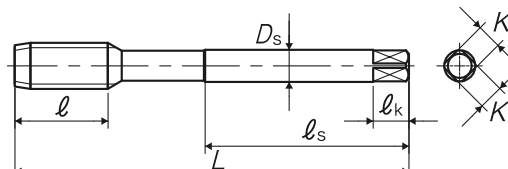
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DIN371



TYPE:3

DIN376



N+RZ Roll Taps for Steels

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE
For Metric Threads												
M2.5 × 0.45	ISO2X	RE2.5FBHEXB	2P	50	8	15	33	2.8	2.1	5	4	1
M3 × 0.5	ISO2X	RE3.0GBHEXB	2P	56	9	18	34	3.5	2.7	6	4	1
M3.5 × 0.6	ISO2X	RE3.5HBHEXB	2P	56	11	20	32	4	3	6	4	1
M4 × 0.7	ISO2X	RE4.0IBHEXB	2P	63	13	21	38	4.5	3.4	6	4	1
M5 × 0.8	ISO2X	RE5.0KBHEXB	2P	70	14	25	39	6	4.9	8	4	1
M6 × 1	ISO2X	RE6.0MBHEXB	2P	80	15	30	45	6	4.9	8	4	1

N-RZ Roll Taps for Steels

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE
For Metric Threads												
M8 × 1.25	ISO2X	RD8.0NBHEXB	2P	90	19	35	47	8	6.2	9	6	2
M10 × 1.5	ISO2X	RD10.0OBHEXB	2P	100	23	39	52.5	10	8	11	8	2
M12 × 1.75	ISO2X	RG012PBHEXB	2P	110	26	-	56	9	7	10	8	3
M16 × 2	ISO2X	RG016QBHEXB	2P	110	26	-	56	12	9	12	8	3

Number of oil grooves: M2.5 = non, M3 ~ M6 = 4,
M8 = 3, M10 and larger = 4

⑥ Roll Tap Series

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 Precision Machinery/
Medical Surgical Instruments

JIS

⑥-25



LS-N-RZ

Long Shank Roll Taps for Steels



Specification

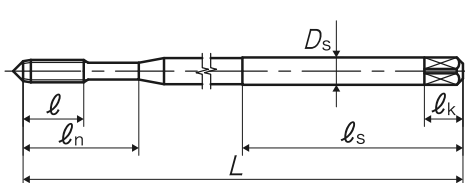


Tapping Speeds depending on Materials

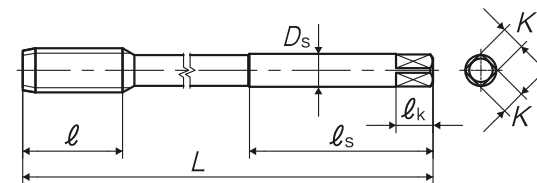
Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼
5~15 (m/min)	5~15 (m/min)

■LS-N-RZ is the long shank forming tap suitable for ferrous materials such as carbon steels, alloy steels and normal steels.

TYPE:1



TYPE:2



Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M3 × 0.5	G5	NRZF53.0GP10	4P	100	9	18	40	4	3.2	6	4	1	¥ 4,250 ※
M3 × 0.5	G5	NRZF53.0GB10	2P	100	9	18	40	4	3.2	6	4	1	¥ 4,250 ※
M3 × 0.5	G6	NRZF63.0GP10	4P	100	9	18	40	4	3.2	6	4	1	¥ 4,250 ※
M3 × 0.5	G6	NRZF63.0GB10	2P	100	9	18	40	4	3.2	6	4	1	¥ 4,250 ※
M4 × 0.7	G6	NRZF64.0IP10	4P	100	11	21	40	5	4	7	4	1	¥ 3,880 ※
M4 × 0.7	G6	NRZF64.0IB10	2P	100	11	21	40	5	4	7	4	1	¥ 3,880 ※
M4 × 0.7	G7	NRZF74.0IP10	4P	100	11	21	40	5	4	7	4	1	¥ 3,880 ※
M4 × 0.7	G7	NRZF74.0IB10	2P	100	11	21	40	5	4	7	4	1	¥ 3,880 ※
M5 × 0.8	G6	NRZF65.0KP10	4P	100	13	25	40	5.5	4.5	7	4	1	¥ 3,390 ※
M5 × 0.8	G6	NRZF65.0KB10	2P	100	13	25	40	5.5	4.5	7	4	1	¥ 3,390 ※
M5 × 0.8	G7	NRZF75.0KP10	4P	100	13	25	40	5.5	4.5	7	4	1	¥ 3,390 ※
M5 × 0.8	G7	NRZF75.0KB10	2P	100	13	25	40	5.5	4.5	7	4	1	¥ 3,390 ※
M6 × 1	G7	NRZF76.0MP10	4P	100	15	30	40	6	4.5	7	4	1	¥ 2,910 ※
M6 × 1	G7	NRZF76.0MP15	4P	150	15	30	40	6	4.5	7	4	1	¥ 5,120 ※
M6 × 1	G7	NRZF76.0MB10	2P	100	15	30	40	6	4.5	7	4	1	¥ 2,910 ※
M6 × 1	G7	NRZF76.0MB15	2P	150	15	30	40	6	4.5	7	4	1	¥ 5,120 ※
M6 × 1	G8	NRZF86.0MP10	4P	100	15	30	40	6	4.5	7	4	1	¥ 2,910 ※
M6 × 1	G8	NRZF86.0MP15	4P	150	15	30	40	6	4.5	7	4	1	¥ 5,120 ※
M6 × 1	G8	NRZF86.0MB10	2P	100	15	30	40	6	4.5	7	4	1	¥ 2,910 ※
M6 × 1	G8	NRZF86.0MB15	2P	150	15	30	40	6	4.5	7	4	1	¥ 5,120 ※
M8 × 1.25	G7	NRZM78.0NP10	4P	100	19	-	50	6.2	5	8	6	2	¥ 3,730 ※
M8 × 1.25	G7	NRZM78.0NP15	4P	150	19	-	50	6.2	5	8	6	2	¥ 6,380 ※
M8 × 1.25	G7	NRZM78.0NB10	2P	100	19	-	50	6.2	5	8	6	2	¥ 3,730 ※
M8 × 1.25	G7	NRZM78.0NB15	2P	150	19	-	50	6.2	5	8	6	2	¥ 6,380 ※

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

6

JIS

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
M10 × 1.5	G7	NRZM7010OP10	4P	100	23	-	50	7	5.5	8	8	2	¥ 4,540 ※
M10 × 1.5	G7	NRZM7010OP15	4P	150	23	-	50	7	5.5	8	8	2	¥ 7,410 ※
M10 × 1.5	G7	NRZM7010OB10	2P	100	23	-	50	7	5.5	8	8	2	¥ 4,540 ※
M10 × 1.5	G7	NRZM7010OB15	2P	150	23	-	50	7	5.5	8	8	2	¥ 7,410 ※
M10 × 1.25	G7	NRZM7010NP15	4P	150	23	-	50	7	5.5	8	8	2	¥ 7,410 ※
M10 × 1.25	G7	NRZM7010NB15	2P	150	23	-	50	7	5.5	8	8	2	¥ 7,410 ※

Number of oil grooves : M3~M6=4, M8=3, M10=4

For M6 and smaller, external centers of 2 thread chamfer taps are removed.

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

⑥-26

⑥ Roll Tap Series

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

⑥-27

S

N+RS N-RS

Roll Taps for Non-Ferrous Materials

Specification



Tapping Speeds depending on Materials

Wrought aluminum アルミ圧延材	Aluminum alloy castings アルミ合金鋳物	Zinc alloy castings 亜鉛合金鋳物
5~15 (m/min)	5~15 (m/min)	5~15 (m/min)

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

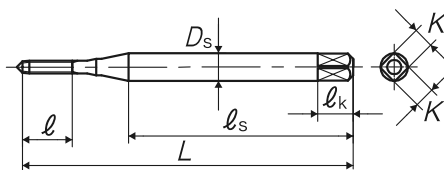


■N+RS/N-RS are the forming taps suitable for non-ferrous materials such as aluminum castings, aluminum diecasting and brass.

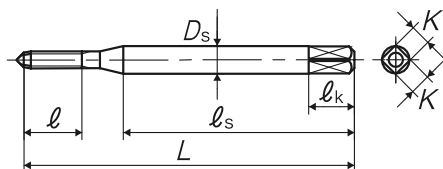
•Product symbol is distinguished depend on the size.

N+RS	~M6 (coarse thread)
N-RS	~M6 (fine threads), M7 ~ , all U, all

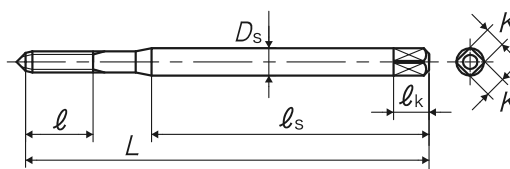
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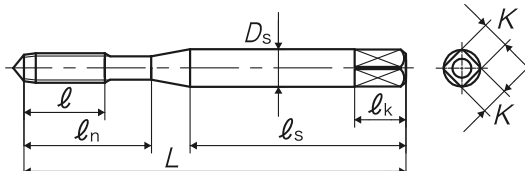
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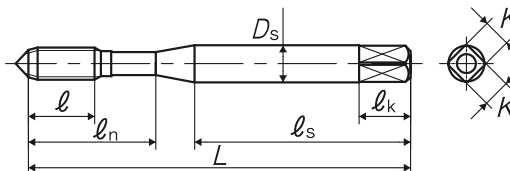
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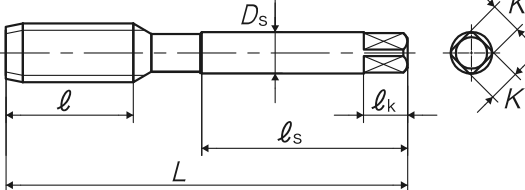
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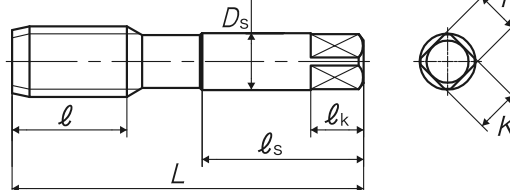
TYPE:5



TYPE:6



TYPE:7



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

N+RS Roll Taps for Non-Ferrous Materials

Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M1 × 0.25	G4	NRSP41.0BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060
M1 × 0.25	G4	NRSP41.0BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060
M1 × 0.25	G5	NRSP51.0BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060 *
M1 × 0.25	G5	NRSP51.0BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060 *
M1.2 × 0.25	G4	NRSP41.2BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060
M1.2 × 0.25	G4	NRSP41.2BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060
M1.2 × 0.25	G5	NRSP51.2BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060
M1.2 × 0.25	G5	NRSP51.2BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 4,060
M1.4 × 0.3	G4	NRSP41.4CP	4P	36	5.4	-	24	3	2.5	5	4	1	¥ 3,320
M1.4 × 0.3	G4	NRSP41.4CB	2P	36	5.4	-	24	3	2.5	5	4	1	¥ 3,320
M1.4 × 0.3	G5	NRSP51.4CP	4P	36	5.4	-	24	3	2.5	5	4	1	¥ 3,320
M1.4 × 0.3	G5	NRSP51.4CB	2P	36	5.4	-	24	3	2.5	5	4	1	¥ 3,320
M1.6 × 0.35	G4	NRSP41.6DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.6 × 0.35	G4	NRSP41.6DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.6 × 0.35	G5	NRSP51.6DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.6 × 0.35	G5	NRSP51.6DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.6 × 0.35	G6	NRSP61.6DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170 *
M1.6 × 0.35	G6	NRSP61.6DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170 *
M1.7 × 0.35	G4	NRSP41.7DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.7 × 0.35	G4	NRSP41.7DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.7 × 0.35	G5	NRSP51.7DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.7 × 0.35	G5	NRSP51.7DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.7 × 0.35	G6	NRSP61.7DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.7 × 0.35	G6	NRSP61.7DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 3,170
M1.8 × 0.35	G4	NRSP41.8DP	4P	42	6.3	-	27	3	2.5	5	4	2	¥ 3,170 *
M1.8 × 0.35	G4	NRSP41.8DB	2P	42	6.3	-	27	3	2.5	5	4	2	¥ 3,170 *
M1.8 × 0.35	G5	NRSP51.8DP	4P	42	6.3	-	27	3	2.5	5	4	2	¥ 3,170 *
M1.8 × 0.35	G5	NRSP51.8DB	2P	42	6.3	-	27	3	2.5	5	4	2	¥ 3,170 *
M2 × 0.4	G4	NRSP42.0EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,570
M2 × 0.4	G4	NRSP42.0EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,570
M2 × 0.4	G5	NRSP52.0EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,570
M2 × 0.4	G5	NRSP52.0EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,570
M2 × 0.4	G6	NRSP62.0EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,570
M2 × 0.4	G6	NRSP62.0EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,570
M2.3 × 0.4	G4	NRSP42.3EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,310
M2.3 × 0.4	G4	NRSP42.3EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,310
M2.3 × 0.4	G5	NRSP52.3EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,310
M2.3 × 0.4	G5	NRSP52.3EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,310
M2.3 × 0.4	G6	NRSP62.3EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,310 *
M2.3 × 0.4	G6	NRSP62.3EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 2,310 *
M2.5 × 0.45	G5	NRSP52.5FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M2.5 × 0.45	G5	NRSP52.5FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M2.5 × 0.45	G6	NRSP62.5FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M2.5 × 0.45	G6	NRSP62.5FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M2.6 × 0.45	G5	NRSP52.6FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M2.6 × 0.45	G5	NRSP52.6FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M2.6 × 0.45	G6	NRSP62.6FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960
M2.6 × 0.45	G6	NRSP62.6FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 1,960

* = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

6

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

⑥-28

6 Roll Tap Series

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

N+RS Roll Taps for Non-Ferrous Materials

	Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
① Spiral Fluted Taps (for blind hole)	M3 × 0.5	G5	NRSP53.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 1,680
	M3 × 0.5	G5	NRSP53.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 1,680
	M3 × 0.5	G6	NRSP63.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 1,680
② Spiral Fluted Taps (for through hole)	M3 × 0.5	G6	NRSP63.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 1,680
	M3 × 0.5	G7	NRSP73.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 1,680
	M3 × 0.5	G7	NRSP73.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 1,680
③ Spiral Pointed Taps (for through hole)	M3 × 0.5	G8	NRSP83.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 1,680 ※
	M3 × 0.5	G8	NRSP83.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 1,680 ※
	M3.5 × 0.6	G5	NRSP53.5HP	4P	52	11	16	29	5	4	7	4	4	¥ 1,790
④ Hand Taps	M3.5 × 0.6	G5	NRSP53.5HB	2P	52	11	16	29	5	4	7	4	4	¥ 1,790
	M3.5 × 0.6	G6	NRSP63.5HP	4P	52	11	16	29	5	4	7	4	4	¥ 1,790
	M3.5 × 0.6	G6	NRSP63.5HB	2P	52	11	16	29	5	4	7	4	4	¥ 1,790
⑤ Cemented Carbide Taps	M3.5 × 0.6	G7	NRSP73.5HP	4P	52	11	16	29	5	4	7	4	4	¥ 1,790 ※
	M4 × 0.7	G5	NRSP54.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 1,680
	M4 × 0.7	G5	NRSP54.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 1,680
⑥ Roll Taps	M4 × 0.7	G6	NRSP64.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 1,680
	M4 × 0.7	G6	NRSP64.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 1,680
	M4 × 0.7	G7	NRSP74.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 1,680
⑦ Special Thread Taps Simple Inspection tools	M4 × 0.7	G7	NRSP74.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 1,680
	M4 × 0.7	G8	NRSP84.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 1,680 ※
	M4 × 0.7	G8	NRSP84.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 1,680 ※
⑧ Pipe Taps	M5 × 0.8	G5	NRSP55.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,690 ※
	M5 × 0.8	G5	NRSP55.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,690 ※
	M5 × 0.8	G6	NRSP65.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,690
⑨ Thread Mills Premium Thread Mills	M5 × 0.8	G6	NRSP65.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,690
	M5 × 0.8	G7	NRSP75.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,690
	M5 × 0.8	G7	NRSP75.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,690
⑩ Dies	M5 × 0.8	G8	NRSP85.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 1,690 ※
	M6 × 1	G5	NRSP56.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 1,950 ※
	M6 × 1	G5	NRSP56.0MB	2P	62	15	26	33	6	4.5	7	4	4	¥ 1,950 ※
⑪ Center Drills Centering Tools	M6 × 1	G6	NRSP66.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 1,950
	M6 × 1	G6	NRSP66.0MB	2P	62	15	26	33	6	4.5	7	4	4	¥ 1,950
	M6 × 1	G7	NRSP76.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 1,950
⑫ Precision Machinery/ Medical Surgical Instruments	M6 × 1	G7	NRSP76.0MB	2P	62	15	26	33	6	4.5	7	4	4	¥ 1,950
	M6 × 1	G8	NRSP86.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 1,950 ※
	M6 × 1	G8	NRSP86.0MB	2P	62	15	26	33	6	4.5	7	4	4	¥ 1,950 ※

N-RS Roll Taps for Non-Ferrous Materials

Recommended class

Segment : 1J

	Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
For Metric Threads														
⑪ Center Drills Centering Tools	M2 × 0.25	G4	NRSM42.0BP	4P	42	4.5	-	27	3	2.5	5	4	3	¥ 3,900 ※
	M2 × 0.25	G4	NRSM42.0BB	2P	42	4.5	-	27	3	2.5	5	4	3	¥ 3,900 ※
	M2 × 0.25	G5	NRSM52.0BP	4P	42	4.5	-	27	3	2.5	5	4	3	¥ 3,900 ※
⑫ Precision Machinery/ Medical Surgical Instruments	M2 × 0.25	G5	NRSM52.0BB	2P	42	4.5	-	27	3	2.5	5	4	3	¥ 3,900 ※
	M2.5 × 0.35	G4	NRSM42.5DP	4P	46	6.3	14	29	3	2.5	5	4	5	¥ 2,890 ※
	M2.5 × 0.35	G4	NRSM42.5DB	2P	46	6.3	14	29	3	2.5	5	4	5	¥ 2,890 ※
⑬ Precision Machinery/ Medical Surgical Instruments	M2.5 × 0.35	G5	NRSM52.5DP	4P	46	6.3	14	29	3	2.5	5	4	5	¥ 2,890 ※
	M2.5 × 0.35	G5	NRSM52.5DB	2P	46	6.3	14	29	3	2.5	5	4	5	¥ 2,890 ※

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

6

JIS

N-RS Roll Taps for Non-Ferrous Materials

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
M2.6 × 0.35	G5	NRSM52.6DP	4P	46	6.3	14	29	3	2.5	5	4	5	¥ 2,890 ※
M2.6 × 0.35	G5	NRSM52.6DB	2P	46	6.3	14	29	3	2.5	5	4	5	¥ 2,890 ※
M2.6 × 0.35	G6	NRSM62.6DP	4P	46	6.3	14	29	3	2.5	5	4	5	¥ 2,890 ※
M2.6 × 0.35	G6	NRSM62.6DB	2P	46	6.3	14	29	3	2.5	5	4	5	¥ 2,890 ※
M3 × 0.35	G5	NRSM53.0DP	4P	46	6.5	14	26	4	3.2	6	4	5	¥ 3,020 ※
M3 × 0.35	G5	NRSM53.0DB	2P	46	6.5	14	26	4	3.2	6	4	5	¥ 3,020 ※
M3 × 0.35	G6	NRSM63.0DP	4P	46	6.5	14	26	4	3.2	6	4	5	¥ 3,020 ※
M3 × 0.35	G6	NRSM63.0DB	2P	46	6.5	14	26	4	3.2	6	4	5	¥ 3,020 ※
M3.5 × 0.35	G5	NRSM53.5DP	4P	52	6.5	16	29	5	4	7	4	5	¥ 3,020 ※
M3.5 × 0.35	G5	NRSM53.5DB	2P	52	6.5	16	29	5	4	7	4	5	¥ 3,020 ※
M3.5 × 0.35	G6	NRSM63.5DP	4P	52	6.5	16	29	5	4	7	4	5	¥ 3,020 ※
M3.5 × 0.35	G6	NRSM63.5DB	2P	52	6.5	16	29	5	4	7	4	5	¥ 3,020 ※
M4 × 0.5	G6	NRSM64.0GP	4P	52	9	17	29	5	4	7	4	5	¥ 2,600 ※
M4 × 0.5	G6	NRSM64.0GB	2P	52	9	17	29	5	4	7	4	5	¥ 2,600 ※
M4 × 0.5	G7	NRSM74.0GP	4P	52	9	17	29	5	4	7	4	5	¥ 2,600 ※
M4 × 0.5	G7	NRSM74.0GB	2P	52	9	17	29	5	4	7	4	5	¥ 2,600 ※
M5 × 0.5	G6	NRSM65.0GP	4P	60	9	22	33	5.5	4.5	7	4	5	¥ 2,600 ※
M5 × 0.5	G6	NRSM65.0GB	2P	60	9	22	33	5.5	4.5	7	4	5	¥ 2,600 ※
M5 × 0.5	G7	NRSM75.0GP	4P	60	9	22	33	5.5	4.5	7	4	5	¥ 2,600 ※
M5 × 0.5	G7	NRSM75.0GB	2P	60	9	22	33	5.5	4.5	7	4	5	¥ 2,600 ※
M6 × 0.75	G6	NRSM66.0JP	4P	62	15	26	33	6	4.5	7	4	4	¥ 2,770 ※
M6 × 0.75	G6	NRSM66.0JB	2P	62	15	26	33	6	4.5	7	4	4	¥ 2,770 ※
M6 × 0.75	G7	NRSM76.0JP	4P	62	15	26	33	6	4.5	7	4	4	¥ 2,770 ※
M6 × 0.75	G7	NRSM76.0JB	2P	62	15	26	33	6	4.5	7	4	4	¥ 2,770 ※
M6 × 0.5	G6	NRSM66.0GP	4P	62	9	26	33	6	4.5	7	4	5	¥ 2,770 ※
M6 × 0.5	G6	NRSM66.0GB	2P	62	9	26	33	6	4.5	7	4	5	¥ 2,770 ※
M7 × 1	G6	NRSM67.0MP	4P	70	19	-	36	6.2	5	8	4	6	¥ 2,460 ※
M7 × 1	G6	NRSM67.0MB	2P	70	19	-	36	6.2	5	8	4	6	¥ 2,460 ※
M7 × 1	G7	NRSM77.0MP	4P	70	19	-	36	6.2	5	8	4	6	¥ 2,460 ※
M7 × 1	G7	NRSM77.0MB	2P	70	19	-	36	6.2	5	8	4	6	¥ 2,460 ※
M7 × 0.75	G7	NRSM77.0JP	4P	70	19	-	36	6.2	5	8	4	6	¥ 3,640 ※
M7 × 0.75	G7	NRSM77.0JB	2P	70	19	-	36	6.2	5	8	4	6	¥ 3,640 ※
M8 × 1.25	G7	NRSM78.0NP	4P	70	19	-	36	6.2	5	8	6	6	¥ 2,830
M8 × 1.25	G7	NRSM78.0NB	2P	70	19	-	36	6.2	5	8	6	6	¥ 2,830
M8 × 1.25	G8	NRSM88.0NP	4P	70	19	-	36	6.2	5	8	6	6	¥ 2,830
M8 × 1.25	G8	NRSM88.0NB	2P	70	19	-	36	6.2	5	8	6	6	¥ 2,830
M8 × 1	G7	NRSM78.0MP	4P	70	19	-	36	6.2	5	8	6	6	¥ 3,230 ※
M8 × 1	G7	NRSM78.0MB	2P	70	19	-	36	6.2	5	8	6	6	¥ 3,230 ※
M8 × 0.75	G7	NRSM78.0JP	4P	70	19	-	36	6.2	5	8	6	6	¥ 3,640 ※
M8 × 0.75	G7	NRSM78.0JB	2P	70	19	-	36	6.2	5	8	6	6	¥ 3,640 ※
M10 × 1.5	G7	NRSM7010OP	4P	75	23	-	38	7	5.5	8	6	6	¥ 3,600
M10 × 1.5	G7	NRSM7010OB	2P	75	23	-	38	7	5.5	8	6	6	¥ 3,600
M10 × 1.5	G8	NRSM8010OP	4P	75	23	-	38	7	5.5	8	6	6	¥ 3,600 ※
M10 × 1.5	G8	NRSM8010OB	2P	75	23	-	38	7	5.5	8	6	6	¥ 3,600 ※
M10 × 1.25	G7	NRSM7010NP	4P	75	23	-	38	7	5.5	8	6	6	¥ 3,600 ※
M10 × 1.25	G7	NRSM7010NB	2P	75	23	-	38	7	5.5	8	6	6	¥ 3,600 ※
M10 × 1.25	G8	NRSM8010NP	4P	75	23	-	38	7	5.5	8	6	6	¥ 3,600 ※
M10 × 1.25	G8	NRSM8010NB	2P	75	23	-	38	7	5.5	8	6	6	¥ 3,600 ※
M10 × 1	G7	NRSM7010MP	4P	75	23	-	38	7	5.5	8	6	6	¥ 4,290 ※
M10 × 1	G7	NRSM7010MB	2P	75	23	-	38	7	5.5	8	6	6	¥ 4,290 ※

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

⑥-30

※ = Specified Distribution Items. Made to order products.

 Think threads with
YAMAWA

6 Roll Tap Series

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

N-RS Roll Taps for Non-Ferrous Materials

	Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
① Spiral Fluted Taps (for blind hole)	M12 × 1.75	G8	NRSM8012PP	4P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,120 ※
	M12 × 1.75	G8	NRSM8012PB	2P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,120 ※
	M12 × 1.75	G9	NRSM9012PP	4P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,120 ※
② Spiral Fluted Taps (for through hole)	M12 × 1.75	G9	NRSM9012PB	2P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,120 ※
	M12 × 1.5	G8	NRSM8012OP	4P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,120 ※
	M12 × 1.5	G8	NRSM8012OB	2P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,120 ※
③ Spiral Pointed Taps (for through hole)	M12 × 1.5	G9	NRSM9012OP	4P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,120 ※
	M12 × 1.5	G9	NRSM9012OB	2P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,120 ※
	M12 × 1.25	G8	NRSM8012NP	4P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,120 ※
④ Hand Taps	M12 × 1.25	G8	NRSM8012NB	2P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,120 ※
	M12 × 1.25	G9	NRSM9012NP	4P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,120 ※
	M12 × 1.25	G9	NRSM9012NB	2P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,120 ※
⑤ Cemented Carbide Taps	M12 × 1	G7	NRSM7012MP	4P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,990 ※
	M12 × 1	G7	NRSM7012MB	2P	82	26	-	42	8.5	6.5	9	6	6	¥ 5,990 ※
	M14 × 2	G9	NRSM9014QP	4P	88	26	-	45	10.5	8	11	6	6	¥ 6,990 ※
⑥ Roll Taps	M14 × 2	G9	NRSM9014QB	2P	88	26	-	45	10.5	8	11	6	6	¥ 6,990 ※
	M14 × 2	G10	NRSM0014QP	4P	88	26	-	45	10.5	8	11	6	6	¥ 6,990 ※
	M14 × 2	G10	NRSM0014QB	2P	88	26	-	45	10.5	8	11	6	6	¥ 6,990 ※
⑦ Special Thread Taps Simple Inspection Tools	M14 × 1.5	G9	NRSM9014OP	4P	88	26	-	45	10.5	8	11	6	6	¥ 6,990 ※
	M14 × 1.5	G9	NRSM9014OB	2P	88	26	-	45	10.5	8	11	6	6	¥ 6,990 ※
	M14 × 1	G8	NRSM8014MP	4P	88	26	-	45	10.5	8	11	6	6	¥ 8,090 ※
⑧ Pipe Taps	M14 × 1	G8	NRSM8014MB	2P	88	26	-	45	10.5	8	11	6	6	¥ 8,090 ※
	M16 × 2	G9	NRSM9016QP	4P	95	26	-	48	12.5	10	13	6	6	¥ 9,310 ※
	M16 × 2	G9	NRSM9016QB	2P	95	26	-	48	12.5	10	13	6	6	¥ 9,310 ※
⑨ Thread Mills Premium Thread Mills	M16 × 2	G10	NRSM0016QP	4P	95	26	-	48	12.5	10	13	6	6	¥ 9,310 ※
	M16 × 2	G10	NRSM0016QB	2P	95	26	-	48	12.5	10	13	6	6	¥ 9,310 ※
	M16 × 1.5	G9	NRSM9016OP	4P	95	26	-	48	12.5	10	13	6	6	¥ 9,310 ※
⑩ Dies	M16 × 1.5	G9	NRSM9016OB	2P	95	26	-	48	12.5	10	13	6	6	¥ 9,310 ※
	M16 × 1	G8	NRSM8016MP	4P	95	26	-	48	12.5	10	13	6	6	¥ 11,200 ※
	M16 × 1	G8	NRSM8016MB	2P	95	26	-	48	12.5	10	13	6	6	¥ 11,200 ※
⑪ Center Drills Centering Tools	M18 × 1.5	G9	NRSM9018OP	4P	100	33	-	51	14	11	14	6	6	¥ 12,600 ※
	M18 × 1.5	G9	NRSM9018OB	2P	100	33	-	51	14	11	14	6	6	¥ 12,600 ※
	M20 × 2.5	G11	NRSM1020RP	4P	105	33	-	50	15	12	15	6	7	¥ 17,300 ※
⑫ Precision Machinery/ Medical Surgical Instruments	M20 × 2.5	G11	NRSM1020RB	2P	105	33	-	50	15	12	15	6	7	¥ 17,300 ※
	M20 × 1.5	G9	NRSM9020OP	4P	105	33	-	50	15	12	15	6	7	¥ 17,300 ※
	M20 × 1.5	G9	NRSM9020OB	2P	105	33	-	50	15	12	15	6	7	¥ 17,300 ※
For Unified Threads														
⑬ Precision Machinery/ Medical Surgical Instruments	No.0-80UNF	G5	NRSM5UN0BP	4P	36	6.3	-	24	3	2.5	5	3	2	¥ 3,630 ※
	No.0-80UNF	G5	NRSM5UN0BB	2P	36	6.3	-	24	3	2.5	5	3	2	¥ 3,630 ※
	No.1-72UNF	G5	NRSM5UN1CP	4P	42	7.2	-	27	3	2.5	5	3	2	¥ 3,630 ※
⑭ Precision Machinery/ Medical Surgical Instruments	No.1-72UNF	G5	NRSM5UN1CB	2P	42	7.2	-	27	3	2.5	5	3	2	¥ 3,630 ※
	No.2-56UNC	G4	NRSM4UN2EP	4P	42	8.1	-	27	3	2.5	5	4	3	¥ 2,660 ※
	No.2-56UNC	G4	NRSM4UN2EB	2P	42	8.1	-	27	3	2.5	5	4	3	¥ 2,660 ※
⑮ Precision Machinery/ Medical Surgical Instruments	No.2-56UNC	G5	NRSM5UN2EP	4P	42	8.1	-	27	3	2.5	5	4	3	¥ 2,660 ※
	No.2-56UNC	G5	NRSM5UN2EB	2P	42	8.1	-	27	3	2.5	5	4	3	¥ 2,660 ※
	No.2-56UNC	G6	NRSM6UN2EP	4P	42	8.1	-	27	3	2.5	5	4	3	¥ 2,660 ※
⑯ Precision Machinery/ Medical Surgical Instruments	No.2-56UNC	G6	NRSM6UN2EB	2P	42	8.1	-	27	3	2.5	5	4	3	¥ 2,660 ※
	No.2-56UNC	G7	NRSM7UN2EP	4P	42	8.1	-	27	3	2.5	5	4	3	¥ 2,660 ※

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

6

JIS

N-RS Roll Taps for Non-Ferrous Materials

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
No.2-56UNC	G7	NRSM7UN2EB	2P	42	8.1	-	27	3	2.5	5	4	3	¥ 2,660 ※
No.3-48UNC	G4	NRSM4UN3FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 2,220 ※
No.3-48UNC	G4	NRSM4UN3FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 2,220 ※
No.3-48UNC	G5	NRSM5UN3FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 2,220 ※
No.3-48UNC	G5	NRSM5UN3FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 2,220 ※
No.4-40UNC	G5	NRSM5UN4HP	4P	46	9	14	25	4	3.2	6	4	4	¥ 2,210 ※
No.4-40UNC	G5	NRSM5UN4HB	2P	46	9	14	25	4	3.2	6	4	4	¥ 2,210 ※
No.4-40UNC	G6	NRSM6UN4HP	4P	46	9	14	25	4	3.2	6	4	4	¥ 2,210 ※
No.4-40UNC	G6	NRSM6UN4HB	2P	46	9	14	25	4	3.2	6	4	4	¥ 2,210 ※
No.4-40UNC	G7	NRSM7UN4HP	4P	46	9	14	25	4	3.2	6	4	4	¥ 2,210 ※
No.4-40UNC	G7	NRSM7UN4HB	2P	46	9	14	25	4	3.2	6	4	4	¥ 2,210 ※
No.4-48UNF	G5	NRSM5UN4FP	4P	46	9	14	25	4	3.2	6	4	4	¥ 2,210 ※
No.4-48UNF	G5	NRSM5UN4FB	2P	46	9	14	25	4	3.2	6	4	4	¥ 2,210 ※
No.4-48UNF	G6	NRSM6UN4FP	4P	46	9	14	25	4	3.2	6	4	4	¥ 2,210 ※
No.4-48UNF	G6	NRSM6UN4FB	2P	46	9	14	25	4	3.2	6	4	4	¥ 2,210 ※
No.5-40UNC	G5	NRSM5UN5HP	4P	52	11	16	28	5	4	7	4	4	¥ 2,050 ※
No.5-44UNF	G6	NRSM6UN5GB	2P	52	11	16	28	5	4	7	4	4	¥ 2,050 ※
No.6-32UNC	G5	NRSM5UN6JP	4P	52	11	17	27	5	4	7	4	4	¥ 2,050 ※
No.6-32UNC	G5	NRSM5UN6JB	2P	52	11	17	27	5	4	7	4	4	¥ 2,050 ※
No.6-32UNC	G6	NRSM6UN6JP	4P	52	11	17	27	5	4	7	4	4	¥ 2,050 ※
No.6-32UNC	G6	NRSM6UN6JB	2P	52	11	17	27	5	4	7	4	4	¥ 2,050 ※
No.6-32UNC	G7	NRSM7UN6JP	4P	52	11	17	27	5	4	7	4	4	¥ 2,050 ※
No.6-32UNC	G7	NRSM7UN6JB	2P	52	11	17	27	5	4	7	4	4	¥ 2,050 ※
No.6-40UNF	G5	NRSM5UN6HP	4P	52	11	17	27	5	4	7	4	4	¥ 2,050 ※
No.6-40UNF	G5	NRSM5UN6HB	2P	52	11	17	27	5	4	7	4	4	¥ 2,050 ※
No.8-32UNC	G6	NRSM6UN8JP	4P	60	13	22	31	5.5	4.5	7	4	4	¥ 2,080 ※
No.8-32UNC	G6	NRSM6UN8JB	2P	60	13	22	31	5.5	4.5	7	4	4	¥ 2,080 ※
No.8-32UNC	G7	NRSM7UN8JP	4P	60	13	22	31	5.5	4.5	7	4	4	¥ 2,080 ※
No.8-32UNC	G7	NRSM7UN8JB	2P	60	13	22	31	5.5	4.5	7	4	4	¥ 2,080 ※
No.8-32UNC	G8	NRSM8UN8JP	4P	60	13	22	31	5.5	4.5	7	4	4	¥ 2,080 ※
No.8-36UNF	G5	NRSM5UN8IP	4P	60	13	22	31	5.5	4.5	7	4	4	¥ 2,080 ※
No.8-36UNF	G5	NRSM5UN8IB	2P	60	13	22	31	5.5	4.5	7	4	4	¥ 2,080 ※
No.8-36UNF	G6	NRSM6UN8IB	2P	60	13	22	31	5.5	4.5	7	4	4	¥ 2,080 ※
No.10-24UNC	G6	NRSM6UNAMP	4P	60	13	22	32	5.5	4.5	7	4	4	¥ 2,080 ※
No.10-24UNC	G6	NRSM6UNAMB	2P	60	13	22	32	5.5	4.5	7	4	4	¥ 2,080 ※
No.10-24UNC	G7	NRSM7UNAMP	4P	60	13	22	32	5.5	4.5	7	4	4	¥ 2,080 ※
No.10-24UNC	G7	NRSM7UNAMB	2P	60	13	22	32	5.5	4.5	7	4	4	¥ 2,080 ※
No.10-32UNF	G6	NRSM6UNAJP	4P	60	13	22	32	5.5	4.5	7	4	4	¥ 2,080 ※
No.10-32UNF	G6	NRSM6UNAJB	2P	60	13	22	32	5.5	4.5	7	4	4	¥ 2,080 ※
No.10-32UNF	G7	NRSM7UNAJP	4P	60	13	22	32	5.5	4.5	7	4	4	¥ 2,080 ※
No.10-32UNF	G7	NRSM7UNAJB	2P	60	13	22	32	5.5	4.5	7	4	4	¥ 2,080 ※
1/4-20UNC	G6	NRSM6U04NP	4P	62	15	26	33	6	4.5	7	4	4	¥ 2,220 ※
1/4-20UNC	G6	NRSM6U04NB	2P	62	15	26	33	6	4.5	7	4	4	¥ 2,220 ※
1/4-20UNC	G7	NRSM7U04NP	4P	62	15	26	33	6	4.5	7	4	4	¥ 2,220 ※
1/4-20UNC	G7	NRSM7U04NB	2P	62	15	26	33	6	4.5	7	4	4	¥ 2,220 ※
1/4-20UNC	G8	NRSM8U04NP	4P	62	15	26	33	6	4.5	7	4	4	¥ 2,220 ※
1/4-20UNC	G8	NRSM8U04NB	2P	62	15	26	33	6	4.5	7	4	4	¥ 2,220 ※
1/4-28UNF	G6	NRSM6U04KP	4P	62	15	26	33	6	4.5	7	4	4	¥ 2,220 ※
1/4-28UNF	G6	NRSM6U04KB	2P	62	15	26	33	6	4.5	7	4	4	¥ 2,220 ※
1/4-28UNF	G7	NRSM7U04KB	2P	62	15	26	33	6	4.5	7	4	4	¥ 2,220 ※

Number of oil grooves : Metric thread : M2.6 and smaller=non, M3 and larger=1 Unified thread : No.4 and smaller=non, No.5 and larger=1 For M4 and smaller, external centers of 2 thread chamfer taps are removed.
M5 to M6 taps with 2P chamfer have internal center at the front end.

※ = 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

⑥-32

6 Roll Tap Series

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

N-RS

Roll Taps for Non-Ferrous Materials



Specification

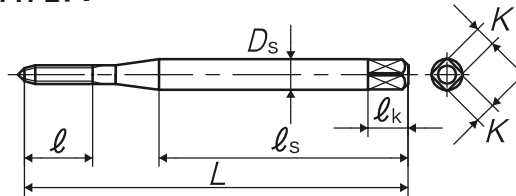


■ N-RS is the forming tap suitable for non-ferrous materials such as aluminum castings, aluminum die castings and brass.

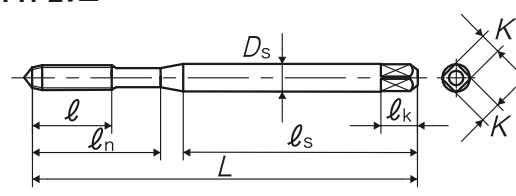
Tapping Speed depending on Materials

Wrought aluminum アルミ圧延材	Aluminum alloy castings アルミ合金鋳物	Zinc alloy castings 亜鉛合金鋳物
5~15 (m/min)	5~15 (m/min)	5~15 (m/min)

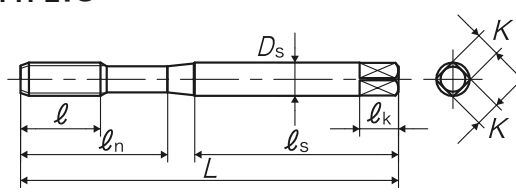
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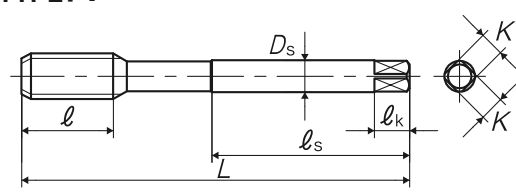
TYPE:2



TYPE:3



TYPE:4



Segment : 1J

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	ℓ_s (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	Lobe	TYPE
For Metric Threads												
M3 × 0.5	D5	388513M	4P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
M3 × 0.5	D5	388512M	2P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
M3.5 × 0.6	D6	388515M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
M3.5 × 0.6	D6	388514M	2P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
M4 × 0.7	D6	388517M	4P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	4	2
M4 × 0.7	D6	388516M	2P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	4	2
M5 × 0.8	D7	388519M	4P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	4	2
M5 × 0.8	D7	388518M	2P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	4	2
M6 × 1	D8	388521M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
M6 × 1	D8	388520M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
M7 × 1	D9	388523M	4P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	4	3
M7 × 1	D9	388522M	2P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	4	3
M8 × 1.25	D9	388527M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
M8 × 1.25	D9	388526M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
M8 × 1	D9	388525M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
M8 × 1	D9	388524M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
M10 × 1.5	D10	388531M	4P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	6	3

ANSI

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

6

ANSI

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	Lobe	TYPE
M10 × 1.5	D10	388530M	2P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	6	3
M10 × 1.25	D9	388529M	4P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	6	3
M10 × 1.25	D9	388528M	2P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	6	3
M12 × 1.75	D11	388535M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	6	4
M12 × 1.75	D11	388534M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	6	4
M12 × 1.25	D9	388533M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	6	4
M12 × 1.25	D9	388532M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	6	4
For Unified Threads												
No.0-80UNF	H2	388410M	2P	1.772	0.236	-	1.161	0.141	0.11	0.187	3	1
No.1-64UNC	H2	388411M	2P	1.772	0.276	-	1.161	0.141	0.11	0.187	3	1
No.1-72UNF	H2	388412M	2P	1.772	0.276	-	1.161	0.141	0.11	0.187	3	1
No.2-56UNC	H2	388413M	2P	1.772	0.314	-	1.161	0.141	0.11	0.187	4	1
No.2-56UNC	H3	388414M	2P	1.772	0.314	-	1.161	0.141	0.11	0.187	4	1
No.2-64UNF	H2	388415M	2P	1.772	0.314	-	1.161	0.141	0.11	0.187	4	1
No.2-64UNF	H3	388416M	2P	1.772	0.314	-	1.161	0.141	0.11	0.187	4	1
No.3-48UNC	H2	388417M	2P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	4	2
No.3-48UNC	H3	388418M	2P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	4	2
No.3-56UNF	H2	388419M	2P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	4	2
No.3-56UNF	H3	388420M	2P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	4	2
No.4-40UNC	H3	388423M	4P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-40UNC	H3	388421M	2P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-40UNC	H5	388424M	4P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-40UNC	H5	388422M	2P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-48UNF	H3	388427M	4P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-48UNF	H3	388425M	2P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-48UNF	H5	388428M	4P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-48UNF	H5	388426M	2P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.5-40UNC	H3	388431M	4P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-40UNC	H3	388429M	2P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-40UNC	H5	388432M	4P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-40UNC	H5	388430M	2P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-44UNF	H3	388435M	4P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-44UNF	H3	388433M	2P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-44UNF	H5	388436M	4P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.5-44UNF	H5	388434M	2P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.6-32UNC	H3	388440M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-32UNC	H3	388437M	2P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-32UNC	H5	388441M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-32UNC	H5	388438M	2P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-40UNF	H3	388444M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-40UNF	H3	388442M	2P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-40UNF	H5	388445M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-40UNF	H5	388443M	2P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.8-32UNC	H3	388448M	4P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-32UNC	H3	388446M	2P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-32UNC	H5	388449M	4P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-32UNC	H5	388447M	2P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-36UNF	H3	388452M	4P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-36UNF	H3	388450M	2P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-36UNF	H5	388453M	4P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	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

⑥-34

 Think threads with
YAMAWA

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

6 Roll Tap Series

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

N-RS Roll Taps for Non-Ferrous Materials

	Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	Lobe	TYPE
① Spiral Fluted Taps (for blind hole)	No.8-36UNF	H5	388451M	2P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
	No.10-24UNC	H4	388456M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
	No.10-24UNC	H4	388454M	2P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
② Spiral Fluted Taps (for through hole)	No.10-24UNC	H6	388457M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
	No.10-24UNC	H6	388455M	2P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
	No.10-32UNF	H4	388460M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
③ Spiral Pointed Taps (for through hole)	No.10-32UNF	H4	388458M	2P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
	No.10-32UNF	H6	388461M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
	No.10-32UNF	H6	388459M	2P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
④ Hand Taps	No.12-24UNC	H4	388464M	4P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
	No.12-24UNC	H4	388462M	2P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
	No.12-24UNC	H6	388465M	4P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
⑤ Cemented Carbide Taps	No.12-24UNC	H6	388463M	2P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
	No.12-28UNF	H4	388468M	4P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
	No.12-28UNF	H4	388466M	2P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
⑥ Roll Taps	No.12-28UNF	H4	388469M	4P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
	No.12-28UNF	H6	388467M	2P	3.15	0.591	0.984	1.953	0.22	0.165	0.281	4	2
	1/4-20UNC	H4	388472M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
⑦ Special Thread Taps Simple Inspection Tools	1/4-20UNC	H4	388470M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
	1/4-20UNC	H6	388473M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
	1/4-20UNC	H6	388471M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
⑧ Pipe Taps	1/4-28UNF	H4	388476M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
	1/4-28UNF	H4	388474M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
	1/4-28UNF	H6	388477M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
⑨ Thread Mills Premium Thread Mills	1/4-28UNF	H6	388475M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
	5/16-18UNC	H5	388480M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
	5/16-18UNC	H5	388478M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
⑩ Dies	5/16-18UNC	H7	388481M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
	5/16-18UNC	H7	388479M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
	5/16-24UNF	H5	388484M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
⑪ Center Drills Centering Tools	5/16-24UNF	H5	388482M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
	5/16-24UNF	H7	388485M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
	5/16-24UNF	H7	388483M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
⑫ Precision Machinery/ Medical Surgical Instruments	3/8-16UNC	H5	388488M	4P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
	3/8-16UNC	H5	388486M	2P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
	3/8-16UNC	H7	388489M	4P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
	3/8-16UNC	H7	388487M	2P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
	3/8-24UNF	H5	388492M	4P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
	3/8-24UNF	H5	388490M	2P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
	3/8-24UNF	H7	388493M	4P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
	3/8-24UNF	H7	388491M	2P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
	7/16-14UNC	H5	388496M	4P	3.937	0.906	-	2.008	0.323	0.242	0.406	6	4
	7/16-14UNC	H5	388494M	2P	3.937	0.906	-	2.008	0.323	0.242	0.406	6	4
	7/16-14UNC	H7	388497M	4P	3.937	0.906	-	2.008	0.323	0.242	0.406	6	4
	7/16-14UNC	H7	388495M	2P	3.937	0.906	-	2.008	0.323	0.242	0.406	6	4
	7/16-20UNF	H5	388502M	4P	3.937	0.906	-	2.008	0.323	0.242	0.406	6	4
	7/16-20UNF	H5	388498M	2P	3.937	0.906	-	2.008	0.323	0.242	0.406	6	4
	7/16-20UNF	H7	388503M	4P	3.937	0.906	-	2.008	0.323	0.242	0.406	6	4
	7/16-20UNF	H7	388499M	2P	3.937	0.906	-	2.008	0.323	0.242	0.406	6	4
	1/2-13UNC	H5	388506M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	6	4

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⑥-35

Think threads with
YAMAWA

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

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

N-RS Roll Taps for Non-Ferrous Materials

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	ℓ_s (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	Lobe	TYPE
1/2-13UNC	H5	388504M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	6	4
1/2-13UNC	H7	388507M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	6	4
1/2-13UNC	H7	388505M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	6	4
1/2-20UNF	H5	388510M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	6	4
1/2-20UNF	H5	388508M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	6	4
1/2-20UNF	H7	388511M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	6	4
1/2-20UNF	H7	388509M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	6	4

Number of oil grooves : Metric thread : =1

Unified thread : No.4 and smaller=non, No.5 and larger=1

For M6, 1/4 and smaller, external centers of 2P chamfer taps are removed.

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

⑥-36

⑥ Roll Tap Series

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

⑥-37



N+RS N-RS

Roll Taps for Non-Ferrous Materials

Specification



Tapping Speeds depending on Materials

Wrought aluminum アルミ圧延材	Aluminum alloy castings アルミ合金鋳物	Zinc alloy castings 亜鉛合金鋳物
5~15 (m/min)	5~15 (m/min)	5~15 (m/min)

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

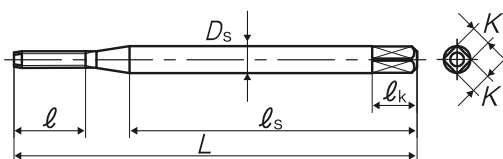


■N+RS/N-RS is the forming tap suitable for non-ferrous materials such as aluminum castings, aluminum die castings and brass.

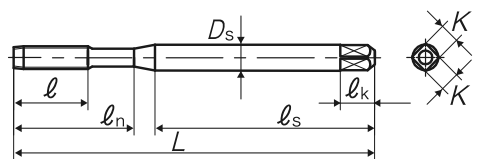
・Product symbol is distinguished depend on the size.

N+RS	~M6
N-RS	M8~

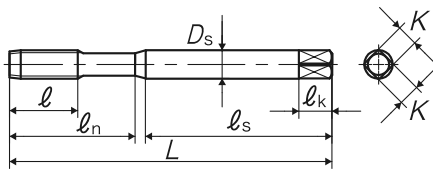
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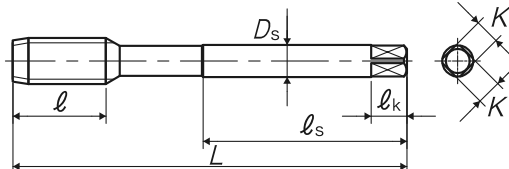
TYPE:2



TYPE:3



TYPE:4



N+RS Roll Taps for Non-Ferrous Materials

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	Lobe	TYPE
For Metric Threads												
M2 × 0.4	ISO2X	RE2.0EBKENB	2P	45	8	-	32	2.8	2.1	5	4	1
M2.3 × 0.4	ISO2X	RE2.3EBKENB	2P	45	9	-	32	2.8	2.1	5	4	1
M2.5 × 0.45	ISO2X	RE2.5FBKENB	2P	50	8	15	33	2.8	2.1	5	4	2
M3 × 0.5	ISO2X	RE3.0GBKENB	2P	56	9	18	34	3.5	2.7	6	4	2
M4 × 0.7	ISO2X	RE4.0IBKENB	2P	63	13	21	38	4.5	3.4	6	4	2
M5 × 0.8	ISO2X	RE5.0KBKENB	2P	70	14	25	39	6	4.9	8	4	2
M6 × 1	ISO2X	RE6.0MBKENB	2P	80	15	30	45	6	4.9	8	4	2

N-RS Roll Taps for Non-Ferrous Materials

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	Lobe	TYPE
For Metric Threads												
M8 × 1.25	ISO2X	RD8.0NBKENB	2P	90	19	35	47	8	6.2	9	6	3
M10 × 1.5	ISO2X	RD010OBKENB	2P	100	23	39	52.5	10	8	11	6	3
M12 × 1.75	ISO2X	RG012PBKENB	2P	110	26	-	56	9	7	10	6	4

Number of oil grooves: M2.5 and smaller = non, M3 and larger = 1

Think threads with
YAMAWA

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

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

LS-N-RS

Long Shank Roll Taps for Non-Ferrous Materials



Specification

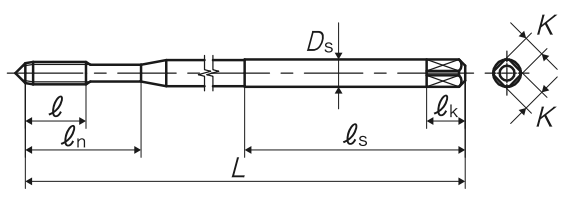


■LS-N-RS is the long shank forming tap suitable for non-ferrous materials such as aluminum castings, aluminum diecasting and brass.

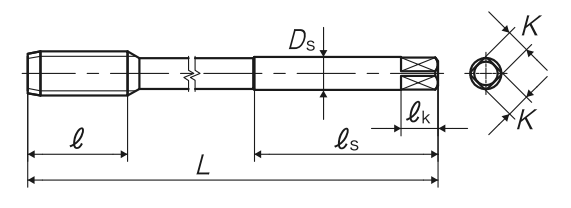
Tapping Speeds depending on Materials

Wrought aluminum アルミ圧延材 5~15 (m/min)	Aluminum alloy castings アルミ合金鋳物 5~15 (m/min)	Zinc alloy castings 亜鉛合金鋳物 5~15 (m/min)
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TYPE:1



TYPE:2



Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M3 × 0.5	G5	NRSF53.0GP10	4P	100	9	18	40	4	3.2	6	4	1	¥ 4,250
M3 × 0.5	G5	NRSF53.0GB10	2P	100	9	18	40	4	3.2	6	4	1	¥ 4,250
M3 × 0.5	G6	NRSF63.0GP10	4P	100	9	18	40	4	3.2	6	4	1	¥ 4,250
M3 × 0.5	G6	NRSF63.0GB10	2P	100	9	18	40	4	3.2	6	4	1	¥ 4,250
M4 × 0.7	G6	NRSF64.0IP10	4P	100	11	21	40	5	4	7	4	1	¥ 3,880
M4 × 0.7	G6	NRSF64.0IB10	2P	100	11	21	40	5	4	7	4	1	¥ 3,880
M4 × 0.7	G7	NRSF74.0IP10	4P	100	11	21	40	5	4	7	4	1	¥ 3,880
M4 × 0.7	G7	NRSF74.0IB10	2P	100	11	21	40	5	4	7	4	1	¥ 3,880
M5 × 0.8	G6	NRSF65.0KP10	4P	100	13	25	40	5.5	4.5	7	4	1	¥ 3,390 ※
M5 × 0.8	G6	NRSF65.0KB10	2P	100	13	25	40	5.5	4.5	7	4	1	¥ 3,390 ※
M5 × 0.8	G7	NRSF75.0KP10	4P	100	13	25	40	5.5	4.5	7	4	1	¥ 3,390 ※
M5 × 0.8	G7	NRSF75.0KB10	2P	100	13	25	40	5.5	4.5	7	4	1	¥ 3,390 ※
M6 × 1	G7	NRSF76.0MP10	4P	100	15	30	40	6	4.5	7	4	1	¥ 2,910
M6 × 1	G7	NRSF76.0MP15	4P	150	15	30	40	6	4.5	7	4	1	¥ 5,120
M6 × 1	G7	NRSF76.0MB10	2P	100	15	30	40	6	4.5	7	4	1	¥ 2,910
M6 × 1	G7	NRSF76.0MB15	2P	150	15	30	40	6	4.5	7	4	1	¥ 5,120
M6 × 1	G8	NRSF86.0MP10	4P	100	15	30	40	6	4.5	7	4	1	¥ 2,910 ※
M6 × 1	G8	NRSF86.0MP15	4P	150	15	30	40	6	4.5	7	4	1	¥ 5,120 ※
M6 × 1	G8	NRSF86.0MB10	2P	100	15	30	40	6	4.5	7	4	1	¥ 2,910 ※
M6 × 1	G8	NRSF86.0MB15	2P	150	15	30	40	6	4.5	7	4	1	¥ 5,120 ※
M8 × 1.25	G7	NRSM78.0NP10	4P	100	19	-	50	6.2	5	8	6	2	¥ 3,730 ※
M8 × 1.25	G7	NRSM78.0NP15	4P	150	19	-	50	6.2	5	8	6	2	¥ 6,380 ※
M8 × 1.25	G7	NRSM78.0NB10	2P	100	19	-	50	6.2	5	8	6	2	¥ 3,730 ※
M8 × 1.25	G7	NRSM78.0NB15	2P	150	19	-	50	6.2	5	8	6	2	¥ 6,380 ※

※ = Specified Distribution Items. Made to order products.

⑥ Roll Tap Series

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-N-RS Long Shank Roll Taps for Non-Ferrous Materials

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
M10 × 1.5	G7	NRSM7010OP10	4P	100	23	-	50	7	5.5	8	6	2	¥ 4,540 ※
M10 × 1.5	G7	NRSM7010OP15	4P	150	23	-	50	7	5.5	8	6	2	¥ 7,410 ※
M10 × 1.5	G7	NRSM7010OB10	2P	100	23	-	50	7	5.5	8	6	2	¥ 4,540 ※
M10 × 1.5	G7	NRSM7010OB15	2P	150	23	-	50	7	5.5	8	6	2	¥ 7,410 ※
M10 × 1.25	G7	NRSM7010NB10	2P	100	23	-	50	7	5.5	8	6	2	¥ 4,540 ※
M10 × 1.25	G7	NRSM7010NB15	2P	150	23	-	50	7	5.5	8	6	2	¥ 7,410 ※

Number of oil grooves : 1

For M6 and smaller, external centers of 2P chamfer taps are removed.

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

R+V

Roll Taps, Coated

Specification

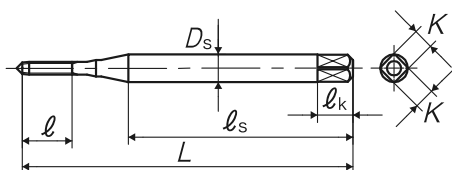


■R+V is coated forming tap for ferrous and non-ferrous materials. Optimum coating suitable to the tapping condition.

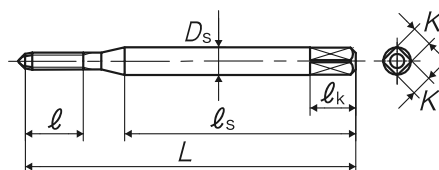
Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼	Stainless steels ステンレス鋼	Copper 銅	Wrought aluminum アルミ圧延材	Aluminum alloy castings アルミ合金鋳物	Zinc alloy castings 亜鉛合金鋳物
10~20 (m/min)	10~20 (m/min)	10~20 (m/min)	10~20 (m/min)	10~20 (m/min)	10~20 (m/min)	10~20 (m/min)

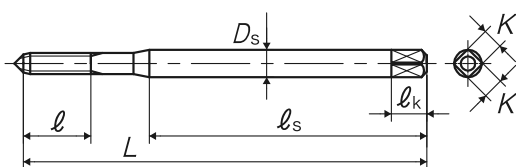
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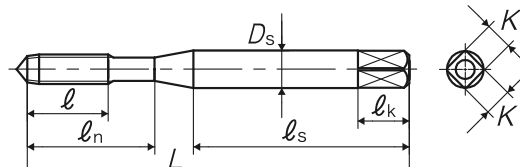
TYPE:2



TYPE:3



TYPE:4



Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M1 × 0.25	G4	RVP41.0BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 5,270
M1 × 0.25	G4	RVP41.0BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 5,270
M1 × 0.25	G5	RVP51.0BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 5,270 ※
M1 × 0.25	G5	RVP51.0BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 5,270 ※
M1.2 × 0.25	G4	RVP41.2BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 5,270
M1.2 × 0.25	G4	RVP41.2BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 5,270
M1.2 × 0.25	G5	RVP51.2BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 5,270 ※
M1.2 × 0.25	G5	RVP51.2BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 5,270 ※
M1.4 × 0.3	G4	RVP41.4CP	4P	36	5.4	-	24	3	2.5	5	4	1	¥ 4,740
M1.4 × 0.3	G4	RVP41.4CB	2P	36	5.4	-	24	3	2.5	5	4	1	¥ 4,740
M1.4 × 0.3	G5	RVP51.4CP	4P	36	5.4	-	24	3	2.5	5	4	1	¥ 4,740
M1.4 × 0.3	G5	RVP51.4CB	2P	36	5.4	-	24	3	2.5	5	4	1	¥ 4,740
M1.6 × 0.35	G4	RVP41.6DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,540
M1.6 × 0.35	G4	RVP41.6DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,540
M1.6 × 0.35	G5	RVP51.6DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,540
M1.6 × 0.35	G5	RVP51.6DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,540
M1.6 × 0.35	G6	RVP61.6DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,540 ※

※ = Specified Distribution Items. Made to order products.

Think threads with
YAMAWA

6 Roll Tap Series

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

R+V Roll Taps, Coated

	Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
① Spiral Fluted Taps (for blind hole)	M1.7 × 0.35	G4	RVP41.7DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,540
	M1.7 × 0.35	G4	RVP41.7DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,540
	M1.7 × 0.35	G5	RVP51.7DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,540
② Spiral Fluted Taps (for through hole)	M1.7 × 0.35	G5	RVP51.7DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,540
	M1.7 × 0.35	G6	RVP61.7DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,540 ※
	M1.7 × 0.35	G6	RVP61.7DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,540 ※
③ Spiral Pointed Taps (for through hole)	M2 × 0.4	G4	RVP42.0EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,180
	M2 × 0.4	G4	RVP42.0EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,180
	M2 × 0.4	G5	RVP52.0EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,180
④ Hand Taps	M2 × 0.4	G5	RVP52.0EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,180
	M2 × 0.4	G6	RVP62.0EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,180 ※
	M2 × 0.4	G6	RVP62.0EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,180 ※
⑤ Cemented Carbide Taps	M2.3 × 0.4	G4	RVP42.3EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 3,990 ※
	M2.3 × 0.4	G4	RVP42.3EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 3,990 ※
	M2.3 × 0.4	G5	RVP52.3EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 3,990 ※
⑥ Roll Taps	M2.3 × 0.4	G5	RVP52.3EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 3,990 ※
	M2.5 × 0.45	G5	RVP52.5FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 3,680
	M2.5 × 0.45	G5	RVP52.5FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 3,680
⑦ Special Thread Taps Simple Inspection Tools	M2.5 × 0.45	G6	RVP62.5FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 3,680 ※
	M2.5 × 0.45	G6	RVP62.5FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 3,680 ※
	M2.6 × 0.45	G5	RVP52.6FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 3,680
⑧ Pipe Taps	M2.6 × 0.45	G5	RVP52.6FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 3,680
	M2.6 × 0.45	G6	RVP62.6FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 3,680
	M2.6 × 0.45	G6	RVP62.6FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 3,680
⑨ Thread Mills Premium Thread Mills	M3 × 0.5	G5	RVP53.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 3,480
	M3 × 0.5	G5	RVP53.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 3,480
	M3 × 0.5	G6	RVP63.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 3,480
⑩ Dies	M3 × 0.5	G6	RVP63.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 3,480
	M3 × 0.5	G7	RVP73.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 3,480
	M3 × 0.5	G7	RVP73.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 3,480
⑪ Center Drills Centering Tools	M4 × 0.7	G8	RVP83.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 3,480 ※
	M4 × 0.7	G5	RVP54.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 3,490 ※
	M4 × 0.7	G5	RVP54.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 3,490 ※
⑫ Precision Machinery/ Medical Surgical Instruments	M4 × 0.7	G6	RVP64.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 3,490
	M4 × 0.7	G6	RVP64.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 3,490
	M4 × 0.7	G7	RVP74.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 3,490
	M4 × 0.7	G7	RVP74.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 3,490
	M4 × 0.7	G8	RVP84.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 3,490 ※
	M4 × 0.7	G8	RVP84.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 3,490 ※
	M5 × 0.8	G5	RVP55.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 3,670 ※
	M5 × 0.8	G5	RVP55.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 3,670 ※
	M5 × 0.8	G6	RVP65.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 3,670
	M5 × 0.8	G6	RVP65.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 3,670
	M5 × 0.8	G7	RVP75.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 3,670
	M5 × 0.8	G7	RVP75.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 3,670
	M5 × 0.8	G8	RVP85.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 3,670 ※
	M5 × 0.8	G8	RVP85.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 3,670 ※

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

R+V Roll Taps, Coated

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE	MSRP
M6 × 1	G6	RVP66.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 3,850
M6 × 1	G6	RVP66.0MB	2P	62	15	26	33	6	4.5	7	4	4	¥ 3,850
M6 × 1	G7	RVP76.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 3,850
M6 × 1	G7	RVP76.0MB	2P	62	15	26	33	6	4.5	7	4	4	¥ 3,850
M6 × 1	G8	RVP86.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 3,850 ※
M6 × 1	G8	RVP86.0MB	2P	62	15	26	33	6	4.5	7	4	4	¥ 3,850 ※

Number of oil grooves : Metric thread : M2.6 and smaller=non, M3 and larger=4
For M6 and smaller, external centers of 2P chamfer taps are removed.

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

⑥-42

⑥ Roll Tap Series

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



OL+RZ OL-RZ

Roll Taps for Dry Tapping, Coated



Specification



• The product symbol is divided by nominal sizes.

OL+RZ	all M
OL-RZ	all U

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	Aluminum alloy castings アルミ合金鋳物
15 ~ 30 (m/min)	15 ~ 30 (m/min)	15 ~ 25 (m/min)	15 ~ 25 (m/min)	15 ~ 25 (m/min) 25~35HRC	10 ~ 25 (m/min)	15 ~ 30 (m/min)

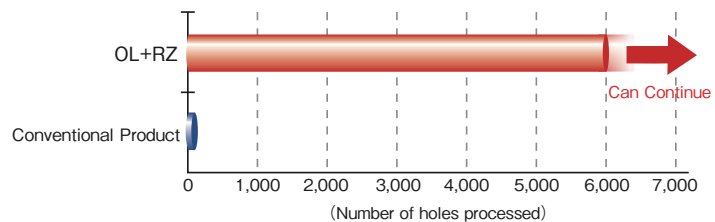
Product Features

- The OL+RZ/OL-RZ roll taps have made it possible tapping without lubrication in the sizes M6 and smaller. These taps are designed for thin steel sheet screw threads or steel with a relatively short screw thread length.
- Increased shank accuracy and an optimum lobe portion design produces a smooth thread forming action and the internal thread accuracy is stabilized even under severe conditions.
- For blind hole tapping, please select the HP+RZ/HP-RZ tap series as an alternative item.

Tapping Data

Processing conditions [M6 × 1 G7P]

Tap Type	OL+RZ, conventional product
Workpiece Material	Rolled steel plate (SPCC)
Bored Hole Size	φ5.55
Tapping Length	4mm through hole
Tapping Speed	15m/min
Machinery Type	Tapping machine
Tapping Fluid	Completely dry



Market Data

Case No.	Size	Class	Processed Workpiece Material	Bored Hole Diameter (mm)	Tapping Depth (mm)	Tapping Speed (m/min)	Machine Type	Tapping Fluid	Market Evaluation
1	M3×0.5	G5	SPCC	φ2.75	6	12	CNC machine	Mist	9,000 holes processed. Good surface finish
2	M6×1	G7	SPCC	φ5.55	4	15	Tapping machine	Mist	15,000 holes processed. Good workability.
3	M1.7×0.35	G5	SS400	φ1.53	1.3	15	Tapping machine	Water soluble	200,000 holes processed. Competitor 100,000 holes.
4	M3×0.5	G5	SUS304	φ2.79	5	15	Special machine	Water soluble	7,000 holes processed. Good workability.
5	M6×1	G7	SS400	φ5.53	12	50	Vertical machining center	Water soluble	5,000 holes processed. Competitors 1,000 holes.

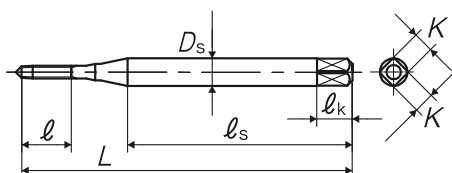
JIS

⑥-43

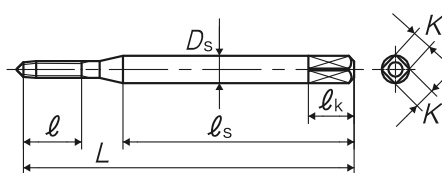
Think threads with
YAMAWA

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

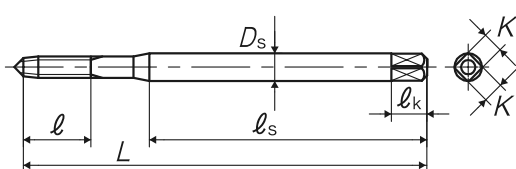
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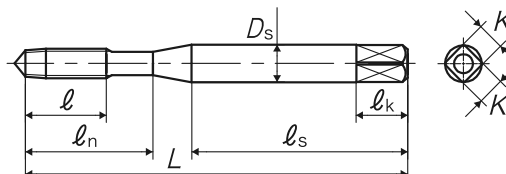
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TYPE:3



TYPE: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

OL+RZ Roll Taps for Dry Tapping, Coated

Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M1 × 0.25	G4	OLRZP41.0BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 5,480 ※
M1.2 × 0.25	G4	OLRZP41.2BP	4P	36	4.5	-	24	3	2.5	5	4	1	¥ 5,480
M1.4 × 0.3	G4	OLRZP41.4CP	4P	36	5.4	-	24	3	2.5	5	4	1	¥ 4,890
M1.6 × 0.35	G4	OLRZP41.6DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,720
M1.6 × 0.35	G6	OLRZP61.6DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,720
M1.7 × 0.35	G4	OLRZP41.7DP	4P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,720
M2 × 0.4	G4	OLRZP42.0EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,480
M2 × 0.4	G5	OLRZP52.0EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,480
M2 × 0.4	G6	OLRZP62.0EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,480 ※
M2.3 × 0.4	G4	OLRZP42.3EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,230
M2.3 × 0.4	G5	OLRZP52.3EP	4P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,230
M2.5 × 0.45	G5	OLRZP52.5FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,080
M2.5 × 0.45	G6	OLRZP62.5FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,080
M2.6 × 0.45	G5	OLRZP52.6FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,080
M2.6 × 0.45	G6	OLRZP62.6FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,080
M3 × 0.5	G5	OLRZP53.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 3,710
M3 × 0.5	G6	OLRZP63.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 3,710
M3.5 × 0.6	G5	OLRZP53.5HP	4P	52	11	16	29	5	4	7	4	4	¥ 3,810 ※
M3.5 × 0.6	G6	OLRZP63.5HP	4P	52	11	16	29	5	4	7	4	4	¥ 3,810
M4 × 0.7	G6	OLRZP64.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 3,810
M4 × 0.7	G7	OLRZP74.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 3,810
M5 × 0.8	G6	OLRZP65.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 4,050
M5 × 0.8	G7	OLRZP75.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 4,050
M6 × 1	G6	OLRZP66.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 4,080
M6 × 1	G7	OLRZP76.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 4,080

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

⑥ Roll Tap Series

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

OL-RZ Roll Taps for Dry Tapping, Coated

Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
For Unified Threads													
No.2-56UNC	G4	OLRZM4UN2EP	4P	42	8.1	-	27	3	2.5	5	4	3	¥ 4,820 ※
No.2-56UNC	G5	OLRZM5UN2EP	4P	42	8.1	-	27	3	2.5	5	4	3	¥ 4,820 ※
No.2-64UNF	G4	OLRZM4UN2DP	4P	42	8.1	-	27	3	2.5	5	4	3	¥ 4,820 ※
No.3-48UNC	G4	OLRZM4UN3FP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,530 ※
No.3-56UNF	G4	OLRZM4UN3EP	4P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,530 ※
No.4-40UNC	G5	OLRZM5UN4HP	4P	46	9	14	25	4	3.2	6	4	4	¥ 4,420
No.4-40UNC	G6	OLRZM6UN4HP	4P	46	9	14	25	4	3.2	6	4	4	¥ 4,420
No.4-48UNF	G5	OLRZM5UN4FP	4P	46	9	14	25	4	3.2	6	4	4	¥ 4,420 ※
No.5-40UNC	G5	OLRZM5UN5HP	4P	52	11	16	28	5	4	7	4	4	¥ 4,040 ※
No.5-44UNF	G5	OLRZM5UN5GP	4P	52	11	16	28	5	4	7	4	4	¥ 4,040 ※
No.6-32UNC	G5	OLRZM5UN6JP	4P	52	11	17	27	5	4	7	4	4	¥ 4,040 ※
No.6-32UNC	G6	OLRZM6UN6JP	4P	52	11	17	27	5	4	7	4	4	¥ 4,040
No.6-40UNF	G5	OLRZM5UN6HP	4P	52	11	17	27	5	4	7	4	4	¥ 4,040 ※
No.8-32UNC	G6	OLRZM6UN8JP	4P	60	13	22	31	5.5	4.5	7	4	4	¥ 4,280 ※
No.8-32UNC	G7	OLRZM7UN8JP	4P	60	13	22	31	5.5	4.5	7	4	4	¥ 4,280 ※
No.8-36UNF	G6	OLRZM6UN8IP	4P	60	13	22	31	5.5	4.5	7	4	4	¥ 4,280 ※
No.10-24UNC	G6	OLRZM6UNAMP	4P	60	13	22	32	5.5	4.5	7	4	4	¥ 4,280 ※
No.10-24UNC	G7	OLRZM7UNAMP	4P	60	13	22	32	5.5	4.5	7	4	4	¥ 4,280 ※
No.10-32UNF	G6	OLRZM6UNAJP	4P	60	13	22	32	5.5	4.5	7	4	4	¥ 4,280 ※
No.10-32UNF	G7	OLRZM7UNAJP	4P	60	13	22	32	5.5	4.5	7	4	4	¥ 4,280 ※
No.12-24UNC	G6	OLRZM6UNCMP	4P	62	15	26	32	6	4.5	7	4	4	¥ 4,590 ※
No.12-28UNF	G6	OLRZM6UNCKP	4P	62	15	26	32	6	4.5	7	4	4	¥ 4,590 ※
1/4-20UNC	G7	OLRZM7U04NP	4P	62	15	26	33	6	4.5	7	4	4	¥ 4,590 ※
1/4-28UNF	G7	OLRZM7U04KP	4P	62	15	26	33	6	4.5	7	4	4	¥ 4,590 ※

Number of oil grooves : non

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

⑥-45

Think threads with
YAMAWA

※ = Specified Distribution Items. Made to order products.

OL-RZ

Roll Taps for Dry Tapping, Coated



Specification

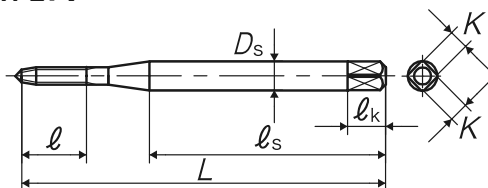


Tapping Speed depending on Materials

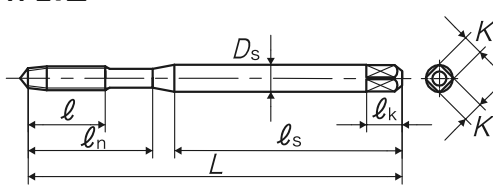
Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼	Thermal refined steels 調質鋼	Stainless steels ステンレス鋼	Aluminum alloy castings アルミ合金鋳物
15 ~ 30 (m/min)	15 ~ 30 (m/min)	15 ~ 25 (m/min)	15 ~ 25 (m/min)	15 ~ 25 (m/min)	10 ~ 25 (m/min)	15 ~ 30 (m/min)
25~35HRC						

■OL-RZ is the forming tap enabling dry tapping under following condition : tapping sizes of smaller than M6, thin steel sheets having burring operation, and steel parts with rather short length. Optimum coating suitable to the tapping condition.

TYPE:1



TYPE:2



Segment : 1J

Size	Class	Code	Chamfer	L (inch)	l (inch)	ln (inch)	ls (inch)	Ds (inch)	K (inch)	lk (inch)	Lobe	TYPE
For Metric Threads												
M3 × 0.5	D5	386610M	4P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
M3.5 × 0.6	D6	386611M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
M4 × 0.7	D6	386612M	4P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	4	2
M5 × 0.8	D7	386614M	4P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	4	2
M6 × 1	D8	386615M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
For Unified Threads												
No.2-56UNC	H3	386600M	4P	1.772	0.314	-	1.161	0.141	0.11	0.187	4	1
No.4-40UNC	H5	386601M	4P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-48UNF	H5	386602M	4P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.5-40UNC	H5	386603M	4P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.6-32UNC	H5	386604M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.8-32UNC	H5	386605M	4P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.10-24UNC	H6	386606M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-32UNF	H6	386607M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
1/4-20UNC	H6	386608M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-28UNF	H6	386609M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2

Number of oil grooves : non

⑥ Roll Tap Series

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

⑥-47

DIN

OL+RZ

Roll Taps for Dry Tapping, Coated



Specification

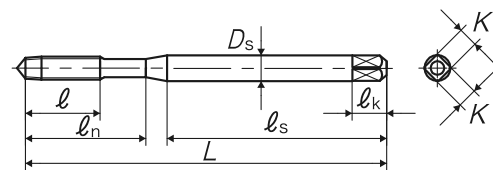


■OL+RZ is the forming taps enabling dry tapping under following condition : tapping sizes of smaller than M6, thin steel sheets having burring operation, and steel parts with rather short length. Optimum coating suitable to the tapping condition.

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	Thermal refined steels 調質鋼	Stainless steels ステンレス鋼	Aluminum alloy castings アルミ合金鋳物
15 ~ 30 (m/min)	15 ~ 30 (m/min)	15 ~ 25 (m/min)	15 ~ 25 (m/min)	15 ~ 25 (m/min) 25~35HRC	10 ~ 25 (m/min)	15 ~ 30 (m/min)

TYPE: 1



Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE
For Metric Threads												
M3 × 0.5	ISO2X	RE3.0GBHPTP	4P	56	9	18	34	3.5	2.7	6	4	1
M4 × 0.7	ISO2X	RE4.0IBHPTP	4P	63	13	21	38	4.5	3.4	6	4	1
M5 × 0.8	ISO2X	RE5.0KBHPTP	4P	70	14	25	39	6	4.9	8	4	1
M6 × 1	ISO2X	RE6.0MBHPTP	4P	80	15	30	45	6	4.9	8	4	1

Number of oil grooves : non

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

⑥ Roll Tap Series

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

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



HP+RZ HP-RZ

High Performance Roll Taps, Coated

Specification



• The product symbol is divided by nominal sizes.

HP+RZ	~ M6
HP-RZ	M8 ~, all U

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	Aluminum alloy castings アルミ合金鋳物
15 ~ 30 (m/min)	15 ~ 30 (m/min)	15 ~ 25 (m/min)	15 ~ 25 (m/min)	15 ~ 25 (m/min) 25~35HRC	10 ~ 25 (m/min)	15 ~ 30 (m/min)

Product Features

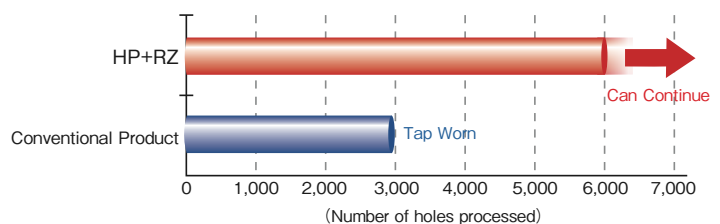
- The HP+RZ/HP-RZ roll taps are suitable for processing steel materials with a hardness of 35 HRC or less and light alloys. These roll taps are recommended for high speed machining 20 to 50 m/min.
- Roll form processing of stainless steel and thermal refined materials up to 40 HRC are now possible.
- The roll form tapping torque has been reduced by 20% or more, making it possible to significantly improve tool life compared with conventional roll form tap products.
- The HP+RZ/HP-RZ taps make it possible to use a water soluble cutting fluid.

Tapping Data

Processing conditions [M2 × 0.4 G4 B]

Tap Type	HP+RZ, conventional product
Workpiece Material	SS400
Bored Hole Size	φ 1.83
Tapping Length	3mm blind hole
Tapping Speed	50m/min
Machinery Type	Vertical MC (synchronous feed)
Tapping Fluid	Water soluble cutting fluid (chlorine-free 10 to 1 dilution)

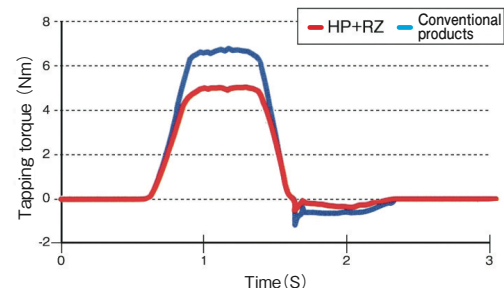
Comparison chart of the number of holes processed.



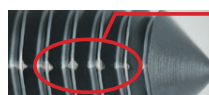
The HP+RZ/HP-RZ roll taps utilize a design to reduce machine tapping torque in difficult to cut materials. (Patent No. 3822572).

Roll form processing conditions [M6 × 1 G7 B]

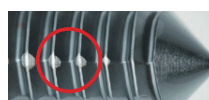
Tap Type	HP+RZ, conventional product
Workpiece Material	SUS304
Bored Hole Size	φ 5.5
Tapping Length	8mm blind hole
Tapping Speed	15m/min
Machinery Type	Vertical MC (synchronous feed)
Tapping Fluid	Insoluble cutting fluid



Using an optimal design on the chamfer portion, the HP+RZ forms the internal thread from the first chamfer portion, reducing the processing burden on each thread while producing a smooth screw thread.



Chamfer portion works from the first thread lobe.



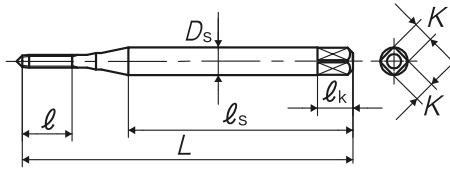
Impressions on the lobes of the HP+RZ

Traces of wear on a conventional tap product.

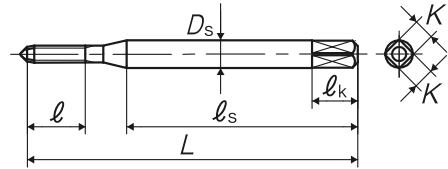
JIS

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

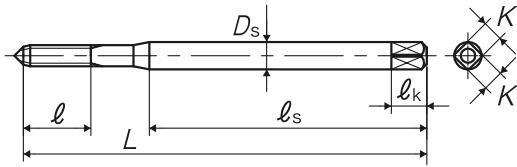
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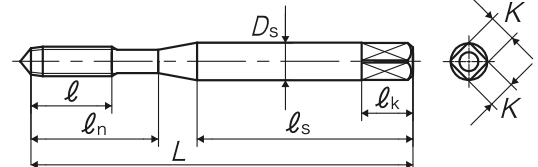
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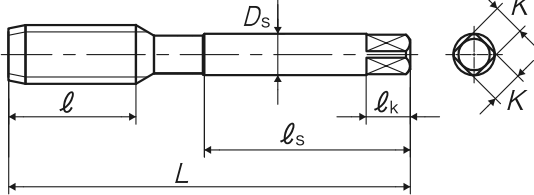
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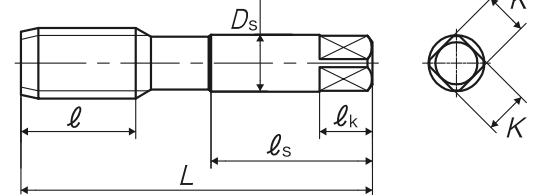
TYPE:4



TYPE:5



TYPE:6



HP+RZ High Performance Roll Taps, Coated

Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M1 × 0.25	G4	HRZP41.0BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 5,480
M1.2 × 0.25	G4	HRZP41.2BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 5,480
M1.4 × 0.3	G4	HRZP41.4CB	2P	36	5.4	-	24	3	2.5	5	4	1	¥ 4,890
M1.6 × 0.35	G4	HRZP41.6DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,720
M1.7 × 0.35	G4	HRZP41.7DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 4,720
M2 × 0.4	G4	HRZP42.0EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,480
M2 × 0.4	G5	HRZP52.0EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,480
M2.3 × 0.4	G4	HRZP42.3EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,230
M2.3 × 0.4	G5	HRZP52.3EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,230
M2.5 × 0.45	G5	HRZP52.5FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,080
M2.5 × 0.45	G6	HRZP62.5FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,080
M2.6 × 0.45	G5	HRZP52.6FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,080
M2.6 × 0.45	G6	HRZP62.6FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,080
M3 × 0.5	G5	HRZP53.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 3,710
M3 × 0.5	G5	HRZP53.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 3,710
M3 × 0.5	G6	HRZP63.0GP	4P	46	9	14	26	4	3.2	6	4	4	¥ 3,710
M3 × 0.5	G6	HRZP63.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 3,710
M3.5 × 0.6	G5	HRZP53.5HP	4P	52	11	16	29	5	4	7	4	4	¥ 3,810 ※
M3.5 × 0.6	G5	HRZP53.5HB	2P	52	11	16	29	5	4	7	4	4	¥ 3,810 ※
M3.5 × 0.6	G6	HRZP63.5HP	4P	52	11	16	29	5	4	7	4	4	¥ 3,810 ※
M3.5 × 0.6	G6	HRZP63.5HB	2P	52	11	16	29	5	4	7	4	4	¥ 3,810 ※

※ = Specified Distribution Items. Made to order products.

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

⑥ Roll Tap Series

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

HP+RZ High Performance Roll Taps, Coated

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
M4 × 0.7	G6	HRZP64.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 3,810
M4 × 0.7	G6	HRZP64.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 3,810
M4 × 0.7	G7	HRZP74.0IP	4P	52	11	17	29	5	4	7	4	4	¥ 3,810
M4 × 0.7	G7	HRZP74.0IB	2P	52	11	17	29	5	4	7	4	4	¥ 3,810
M5 × 0.8	G6	HRZP65.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 4,050
M5 × 0.8	G6	HRZP65.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 4,050
M5 × 0.8	G7	HRZP75.0KP	4P	60	13	22	33	5.5	4.5	7	4	4	¥ 4,050
M5 × 0.8	G7	HRZP75.0KB	2P	60	13	22	33	5.5	4.5	7	4	4	¥ 4,050
M6 × 1	G6	HRZP66.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 4,340
M6 × 1	G6	HRZP66.0MB	2P	62	15	26	33	6	4.5	7	4	4	¥ 4,340
M6 × 1	G7	HRZP76.0MP	4P	62	15	26	33	6	4.5	7	4	4	¥ 4,340
M6 × 1	G7	HRZP76.0MB	2P	62	15	26	33	6	4.5	7	4	4	¥ 4,340

HP-RZ High Performance Roll Taps, Coated

Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M8 × 1.25	G7	HRZM78.0NP	4P	70	19	-	36	6.2	5	8	6	5	¥ 5,960
M8 × 1.25	G7	HRZM78.0NB	2P	70	19	-	36	6.2	5	8	6	5	¥ 5,960
M8 × 1.25	G8	HRZM88.0NP	4P	70	19	-	36	6.2	5	8	6	5	¥ 5,960
M8 × 1.25	G8	HRZM88.0NB	2P	70	19	-	36	6.2	5	8	6	5	¥ 5,960
M10 × 1.5	G7	HRZM7010OP	4P	75	23	-	38	7	5.5	8	8	5	¥ 7,160
M10 × 1.5	G7	HRZM7010OB	2P	75	23	-	38	7	5.5	8	8	5	¥ 7,160
M10 × 1.5	G8	HRZM8010OP	4P	75	23	-	38	7	5.5	8	8	5	¥ 7,160 ※
M10 × 1.5	G8	HRZM8010OB	2P	75	23	-	38	7	5.5	8	8	5	¥ 7,160 ※
M10 × 1.25	G7	HRZM7010NP	4P	75	23	-	38	7	5.5	8	8	5	¥ 7,160
M10 × 1.25	G7	HRZM7010NB	2P	75	23	-	38	7	5.5	8	8	5	¥ 7,160
M10 × 1.25	G8	HRZM8010NP	4P	75	23	-	38	7	5.5	8	8	5	¥ 7,160 ※
M10 × 1.25	G8	HRZM8010NB	2P	75	23	-	38	7	5.5	8	8	5	¥ 7,160 ※
M12 × 1.75	G8	HRZM8012PP	4P	82	26	-	42	8.5	6.5	9	8	5	¥ 9,780 ※
M12 × 1.75	G8	HRZM8012PB	2P	82	26	-	42	8.5	6.5	9	8	5	¥ 9,780 ※
M12 × 1.75	G9	HRZM9012PP	4P	82	26	-	42	8.5	6.5	9	8	5	¥ 9,780 ※
M12 × 1.75	G9	HRZM9012PB	2P	82	26	-	42	8.5	6.5	9	8	5	¥ 9,780 ※
M12 × 1.5	G8	HRZM8012OP	4P	82	26	-	42	8.5	6.5	9	8	5	¥ 9,780
M12 × 1.5	G8	HRZM8012OB	2P	82	26	-	42	8.5	6.5	9	8	5	¥ 9,780
M12 × 1.5	G9	HRZM9012OP	4P	82	26	-	42	8.5	6.5	9	8	5	¥ 9,780 ※
M12 × 1.5	G9	HRZM9012OB	2P	82	26	-	42	8.5	6.5	9	8	5	¥ 9,780 ※
M12 × 1.25	G8	HRZM8012NP	4P	82	26	-	42	8.5	6.5	9	8	5	¥ 9,780 ※
M12 × 1.25	G8	HRZM8012NB	2P	82	26	-	42	8.5	6.5	9	8	5	¥ 9,780 ※
M12 × 1.25	G9	HRZM9012NP	4P	82	26	-	42	8.5	6.5	9	8	5	¥ 9,780 ※
M12 × 1.25	G9	HRZM9012NB	2P	82	26	-	42	8.5	6.5	9	8	5	¥ 9,780 ※
M14 × 1.5	G9	HRZM9014OP	4P	88	26	-	45	10.5	8	11	8	5	¥ 13,700 ※
M14 × 1.5	G9	HRZM9014OB	2P	88	26	-	45	10.5	8	11	8	5	¥ 13,700 ※
M16 × 1.5	G9	HRZM9016OP	4P	95	26	-	48	12.5	10	13	8	5	¥ 17,000 ※
M16 × 1.5	G9	HRZM9016OB	2P	95	26	-	48	12.5	10	13	8	5	¥ 17,000 ※
M18 × 1.5	G9	HRZM9018OP	4P	100	33	-	51	14	11	14	8	5	¥ 24,000 ※
M18 × 1.5	G9	HRZM9018OB	2P	100	33	-	51	14	11	14	8	5	¥ 24,000 ※
M20 × 1.5	G9	HRZM9020OP	4P	105	33	-	50	15	12	15	8	6	¥ 29,700 ※
M20 × 1.5	G9	HRZM9020OB	2P	105	33	-	50	15	12	15	8	6	¥ 29,700 ※

JIS

⑥-51

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

6

JIS

HP-RZ High Performance Roll Taps, Coated

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE	MSRP
For Unified Threads													
No.2-56UNC	G4	HRZM4UN2EB	2P	42	8.1	-	27	3	2.5	5	4	3	¥ 4,820 ※
No.2-56UNC	G5	HRZM5UN2EB	2P	42	8.1	-	27	3	2.5	5	4	3	¥ 4,820 ※
No.2-64UNF	G4	HRZM4UN2DB	2P	42	8.1	-	27	3	2.5	5	4	3	¥ 4,820 ※
No.3-48UNC	G4	HRZM4UN3FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,530 ※
No.3-56UNF	G4	HRZM4UN3EB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,530 ※
No.4-40UNC	G5	HRZM5UN4HB	2P	46	9	14	25	4	3.2	6	4	4	¥ 4,420
No.4-40UNC	G6	HRZM6UN4HB	2P	46	9	14	25	4	3.2	6	4	4	¥ 4,420
No.4-48UNF	G5	HRZM5UN4FB	2P	46	9	14	25	4	3.2	6	4	4	¥ 4,420 ※
No.5-40UNC	G5	HRZM5UN5HP	4P	52	11	16	28	5	4	7	4	4	¥ 4,040 ※
No.5-40UNC	G5	HRZM5UN5HB	2P	52	11	16	28	5	4	7	4	4	¥ 4,040 ※
No.5-44UNF	G5	HRZM5UN5GP	4P	52	11	16	28	5	4	7	4	4	¥ 4,040 ※
No.5-44UNF	G5	HRZM5UN5GB	2P	52	11	16	28	5	4	7	4	4	¥ 4,040 ※
No.6-32UNC	G5	HRZM5UN6JP	4P	52	11	17	27	5	4	7	4	4	¥ 4,040 ※
No.6-32UNC	G5	HRZM5UN6JB	2P	52	11	17	27	5	4	7	4	4	¥ 4,040 ※
No.6-32UNC	G6	HRZM6UN6JP	4P	52	11	17	27	5	4	7	4	4	¥ 4,040 ※
No.6-32UNC	G6	HRZM6UN6JB	2P	52	11	17	27	5	4	7	4	4	¥ 4,040 ※
No.6-40UNF	G5	HRZM5UN6HP	4P	52	11	17	27	5	4	7	4	4	¥ 4,040 ※
No.6-40UNF	G5	HRZM5UN6HB	2P	52	11	17	27	5	4	7	4	4	¥ 4,040 ※
No.8-32UNC	G6	HRZM6UN8JP	4P	60	13	22	31	5.5	4.5	7	4	4	¥ 4,280 ※
No.8-32UNC	G6	HRZM6UN8JB	2P	60	13	22	31	5.5	4.5	7	4	4	¥ 4,280 ※
No.8-32UNC	G7	HRZM7UN8JP	4P	60	13	22	31	5.5	4.5	7	4	4	¥ 4,280 ※
No.8-32UNC	G7	HRZM7UN8JB	2P	60	13	22	31	5.5	4.5	7	4	4	¥ 4,280 ※
No.8-36UNF	G6	HRZM6UN8IP	4P	60	13	22	31	5.5	4.5	7	4	4	¥ 4,280 ※
No.8-36UNF	G6	HRZM6UN8IB	2P	60	13	22	31	5.5	4.5	7	4	4	¥ 4,280 ※
No.10-24UNC	G6	HRZM6UNAMP	4P	60	13	22	32	5.5	4.5	7	4	4	¥ 4,280 ※
No.10-24UNC	G6	HRZM6UNAMB	2P	60	13	22	32	5.5	4.5	7	4	4	¥ 4,280 ※
No.10-24UNC	G7	HRZM7UNAMP	4P	60	13	22	32	5.5	4.5	7	4	4	¥ 4,280 ※
No.10-24UNC	G7	HRZM7UNAMB	2P	60	13	22	32	5.5	4.5	7	4	4	¥ 4,280 ※
No.10-32UNF	G6	HRZM6UNAJP	4P	60	13	22	32	5.5	4.5	7	4	4	¥ 4,280 ※
No.10-32UNF	G6	HRZM6UNAJB	2P	60	13	22	32	5.5	4.5	7	4	4	¥ 4,280 ※
No.10-32UNF	G7	HRZM7UNAJP	4P	60	13	22	32	5.5	4.5	7	4	4	¥ 4,280 ※
No.10-32UNF	G7	HRZM7UNAJB	2P	60	13	22	32	5.5	4.5	7	4	4	¥ 4,280 ※
No.12-24UNC	G6	HRZM6UNCMP	4P	62	15	26	32	6	4.5	7	4	4	¥ 4,590 ※
No.12-24UNC	G6	HRZM6UNCMB	2P	62	15	26	32	6	4.5	7	4	4	¥ 4,590 ※
No.12-28UNF	G6	HRZM6UNCKP	4P	62	15	26	32	6	4.5	7	4	4	¥ 4,590 ※
No.12-28UNF	G6	HRZM6UNCKB	2P	62	15	26	32	6	4.5	7	4	4	¥ 4,590 ※
1/4-20UNC	G7	HRZM7U04NP	4P	62	15	26	33	6	4.5	7	4	4	¥ 4,590 ※
1/4-20UNC	G7	HRZM7U04NB	2P	62	15	26	33	6	4.5	7	4	4	¥ 4,590 ※
1/4-28UNF	G7	HRZM7U04KP	4P	62	15	26	33	6	4.5	7	4	4	¥ 4,590 ※
1/4-28UNF	G7	HRZM7U04KB	2P	62	15	26	33	6	4.5	7	4	4	¥ 4,590 ※

Number of oil grooves : Metric thread : M2.6 and smaller=non, M3~M6=2, M8=3, M10 and larger=4

Unified thread : No.4 and smaller=non, No.5 and larger=2

For M6 and smaller, external centers of 2 thread chamfer taps are removed.

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

⑥-52

⑥ Roll Tap Series

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

HP-RZ

High Performance Roll Taps, Coated



Specification

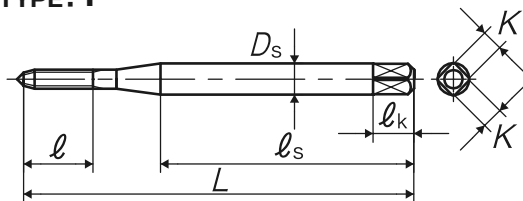


■ HP-RZ is the forming tap suitable for steels (up to 35HRC) and light alloys, and applicable to the high speed tapping. Optimum coating suitable to the tapping condition.

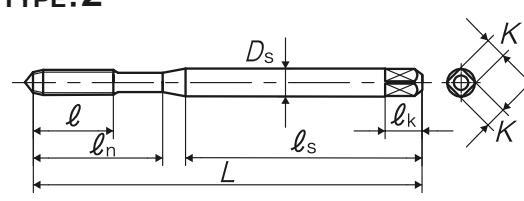
Tapping Speed depending on Materials

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	Thermal refined steels 調質鋼	Stainless steels ステンレス鋼	Aluminum alloy castings アルミ合金鋳物
15 ~ 30 (m/min)	15 ~ 30 (m/min)	15 ~ 25 (m/min)	15 ~ 25 (m/min)	15 ~ 25 (m/min) 25~35HRC	10 ~ 25 (m/min)	15 ~ 30 (m/min)

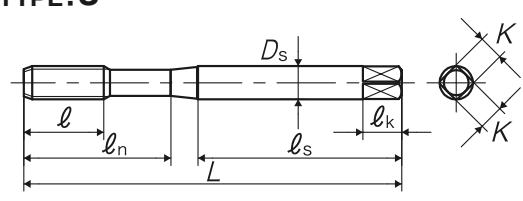
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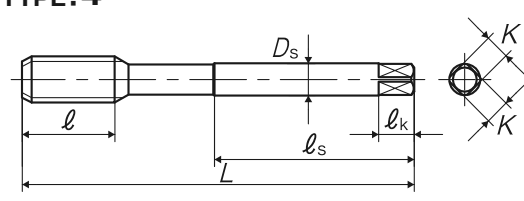
TYPE: 2



TYPE: 3



TYPE: 4



Segment : 1J

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ_n (inch)	ℓ_s (inch)	Ds (inch)	K (inch)	ℓ_k (inch)	Lobe	TYPE
For Metric Threads												
M3 × 0.5	D5	386885M	4P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
M3 × 0.5	D5	386864M	2P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
M3.5 × 0.6	D6	386886M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
M3.5 × 0.6	D6	386865M	2P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
M4 × 0.7	D6	386887M	4P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	4	2
M4 × 0.7	D6	386866M	2P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	4	2
M5 × 0.8	D7	386888M	4P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	4	2
M5 × 0.8	D7	386867M	2P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	4	2
M6 × 1	D8	386889M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
M6 × 1	D8	386868M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
M7 × 1	D9	386870M	4P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	4	3
M7 × 1	D9	386869M	2P	3.543	0.748	1.339	1.831	0.318	0.238	0.375	4	3
M8 × 1.25	D9	386874M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
M8 × 1.25	D9	386873M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
M8 × 1	D9	386872M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
M8 × 1	D9	386871M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
M10 × 1.5	D10	386878M	4P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	8	3

ANSI

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

6

ANSI

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	Lobe	TYPE
M10 × 1.5	D10	386877M	2P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	8	3
M10 × 1.25	D9	386876M	4P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	8	3
M10 × 1.25	D9	386875M	2P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	8	3
M12 × 1.75	D11	386884M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
M12 × 1.75	D11	386883M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
M12 × 1.5	D9	386882M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
M12 × 1.5	D9	386881M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
M12 × 1.25	D9	386880M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
M12 × 1.25	D9	386879M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
For Unified Threads												
No.0-80UNF	H2	386800M	2P	1.772	0.236	-	1.161	0.141	0.11	0.187	3	1
No.2-56UNC	H3	386801M	2P	1.772	0.314	-	1.161	0.141	0.11	0.187	4	1
No.3-48UNC	H3	386802M	2P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	4	2
No.3-56UNF	H3	386803M	2P	2.205	0.354	0.681	1.28	0.141	0.11	0.187	4	2
No.4-40UNC	H3	386804M	2P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-40UNC	H5	386805M	2P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-48UNF	H3	386806M	2P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.4-48UNF	H5	386807M	2P	2.205	0.354	0.709	1.28	0.141	0.11	0.187	4	2
No.5-40UNC	H5	386799M	2P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	4	2
No.6-32UNC	H3	386810M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-32UNC	H3	386808M	2P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-32UNC	H5	386811M	4P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.6-32UNC	H5	386809M	2P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	4	2
No.8-32UNC	H3	386814M	4P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-32UNC	H3	386812M	2P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-32UNC	H5	386815M	4P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.8-32UNC	H5	386813M	2P	2.48	0.512	0.827	1.535	0.168	0.131	0.25	4	2
No.10-24UNC	H4	386818M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-24UNC	H4	386816M	2P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-24UNC	H6	386819M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-24UNC	H6	386817M	2P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-32UNF	H4	386822M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-32UNF	H4	386820M	2P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-32UNF	H6	386823M	4P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
No.10-32UNF	H6	386821M	2P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	4	2
1/4-20UNC	H4	386826M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-20UNC	H4	386824M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-20UNC	H6	386827M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-20UNC	H6	386825M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-28UNF	H4	386830M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-28UNF	H4	386828M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-28UNF	H6	386831M	4P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
1/4-28UNF	H6	386829M	2P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	4	2
5/16-18UNC	H5	386834M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
5/16-18UNC	H5	386832M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
5/16-18UNC	H7	386835M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
5/16-18UNC	H7	386833M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
5/16-24UNF	H5	386838M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
5/16-24UNF	H5	386836M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
5/16-24UNF	H7	386839M	4P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	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

ANSI ⑥-54

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

Think threads with
YAMAWA

⑥ Roll Tap Series

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

HP-RZ High Performance Roll Taps, Coated

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	Lobe	TYPE
5/16-24UNF	H7	386837M	2P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	6	3
3/8-16UNC	H5	386842M	4P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-16UNC	H5	386840M	2P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-16UNC	H7	386843M	4P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-16UNC	H7	386841M	2P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-24UNF	H5	386846M	4P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-24UNF	H5	386844M	2P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-24UNF	H7	386847M	4P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
3/8-24UNF	H7	386845M	2P	3.937	0.906	1.535	2.028	0.381	0.286	0.437	6	3
7/16-14UNC	H5	386850M	4P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-14UNC	H5	386848M	2P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-14UNC	H7	386851M	4P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-14UNC	H7	386849M	2P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-20UNF	H5	386854M	4P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-20UNF	H5	386852M	2P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-20UNF	H7	386855M	4P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
7/16-20UNF	H7	386853M	2P	3.937	0.906	-	2.008	0.323	0.242	0.406	8	4
1/2-13UNC	H5	386858M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-13UNC	H5	386856M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-13UNC	H7	386859M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-13UNC	H7	386857M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-20UNF	H5	386862M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-20UNF	H5	386860M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-20UNF	H7	386863M	4P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4
1/2-20UNF	H7	386861M	2P	4.331	1.024	-	2.205	0.367	0.275	0.437	8	4

Number of oil grooves : Metric thread : M3~M7 = 2, M8 = 3, M10 and larger = 4
 Unified thread : No.4 and smaller = non, No.5~1/4 = 2, 5/16~3/8 = 3, 7/16 and larger = 4
 For M6, 1/4 and smaller, external centers of 2P chamfer taps are removed.

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

⑥-55

Think threads with
YAMAWA

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

HP+RZ HP-RZ

High Performance Roll Taps, Coated

Specification



■ HP+RZ/HP-RZ is the forming tap suitable for steels (up to 35HRC) and light alloys, and applicable to the high speed tapping. Optimum coating suitable to 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	Thermal refined steels 調質鋼
15~30 (m/min)	15~30 (m/min)	15~25 (m/min)	15~25 (m/min)	15~25 (m/min)
				25~35HRC
Stainless steels ステンレス鋼	Aluminum alloy castings アルミ合金鑄物			
10~25 (m/min)	15~30 (m/min)			

・ Product symbol is distinguished depend on the size.

HP+RZ	~ M6
HP-RZ	M8 ~



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

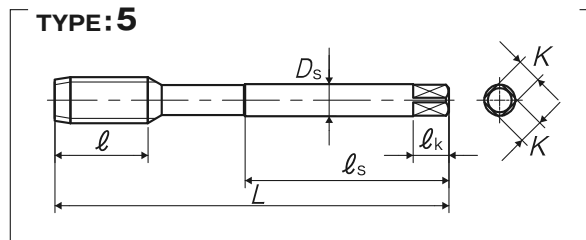
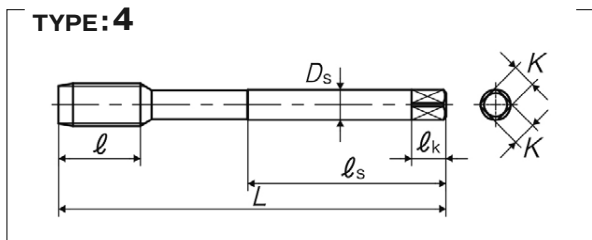
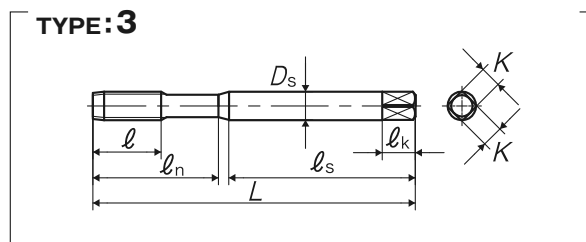
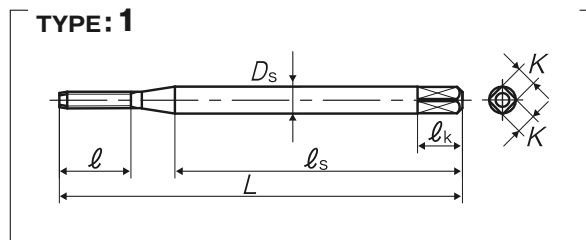
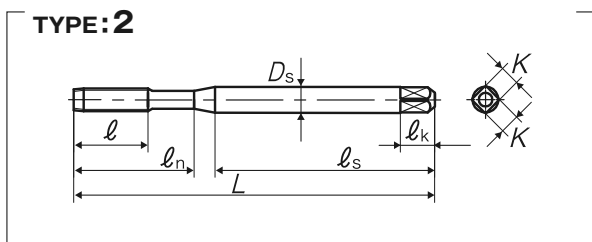
Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪

Precision Machinery/
Medical Surgical Instruments ⑫



HP+RZ High Performance Roll Taps, Coated

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	Lobe	TYPE
For Metric Threads												
M2 × 0.4	ISO2X	RE2.0EBFPTB	2P	45	8	-	32	2.8	2.1	5	4	1
M2 × 0.4	ISO3X	RE2.0ENFPTB	2P	45	8	-	32	2.8	2.1	5	4	1
M2.5 × 0.45	ISO2X	RE2.5FBFPTB	2P	50	8	15	33	2.8	2.1	5	4	2
M2.5 × 0.45	ISO3X	RE2.5FNFPPTB	2P	50	8	15	33	2.8	2.1	5	4	2

⑥ Roll Tap Series

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

HP+RZ High Performance Roll Taps, Coated

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE
M3 × 0.5	ISO2X	RE3.0GBFPTB	2P	56	9	18	34	3.5	2.7	6	4	2
M3 × 0.5	ISO3X	RE3.0GNFPTB	2P	56	9	18	34	3.5	2.7	6	4	2
M4 × 0.7	ISO2X	RE4.0IBFPTB	2P	63	13	21	38	4.5	3.4	6	4	2
M4 × 0.7	ISO3X	RE4.0INFPTB	2P	63	13	21	38	4.5	3.4	6	4	2
M5 × 0.8	ISO2X	RE5.0KBFPTB	2P	70	14	25	39	6	4.9	8	4	2
M5 × 0.8	ISO3X	RE5.0KNFPTB	2P	70	14	25	39	6	4.9	8	4	2
M6 × 1	ISO2X	RE6.0MBFPTB	2P	80	15	30	45	6	4.9	8	4	2
M6 × 1	ISO3X	RE6.0MNFPTB	2P	80	15	30	45	6	4.9	8	4	2

HP-RZ High Performance Roll Taps, Coated

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	Lobe	TYPE
For Metric Threads												
M8 × 1.25	ISO2X	RD8.0NBFPTB	2P	90	19	35	47	8	6.2	9	6	3
M8 × 1.25	ISO3X	RD8.0NNFPTB	2P	90	19	35	47	8	6.2	9	6	3
M10 × 1.5	ISO2X	RD0100BFPTB	2P	100	23	39	52.5	10	8	11	8	3
M10 × 1.5	ISO3X	RD0100NFPTB	2P	100	23	39	52.5	10	8	11	8	3
M10 × 1.25	ISO2X	RM010NBFPTB	2P	100	23	-	51	7	5.5	8	8	4
M12 × 1.75	ISO2X	RG012PBFPTB	2P	110	26	-	56	9	7	10	8	5
M12 × 1.75	ISO3X	RG012PNFPTB	2P	110	26	-	56	9	7	10	8	5
M12 × 1.5	ISO2X	RM0120BFPTB	2P	100	21	-	51	9	7	10	8	4
M12 × 1.25	ISO2X	RM012NBFPTB	2P	100	21	-	51	9	7	10	8	4
M14 × 2	ISO2X	RG014QBFPTB	2P	110	26	-	56	11	9	12	8	5
M14 × 1.5	ISO2X	RM0140BFPTB	2P	100	21	-	51	11	9	12	8	4
M16 × 2	ISO2X	RG016QBFPTB	2P	110	26	-	56	12	9	12	8	5
M16 × 1.5	ISO2X	RM0160BFPTB	2P	100	21	-	51	12	9	12	8	4

Number of oil grooves : M2.6 and smaller = 0, M3 to M6 = 2, M8 = 3, M10 and larger = 4

- Spiral Fluted Taps (for blind hole)
- Spiral Fluted Taps (for through hole)
- Spiral Pointed Taps (for through hole)
- Hand Taps
- Cemented Carbide Taps
- Roll Taps
- Special Thread Taps Simple Inspection Tools
- Pipe Taps
- Thread Mills Premium Thread Mills
- Dies
- Center Drills Centering Tools
- Precision Machinery/ Medical Surgical Instruments

DIN

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

⑥ Roll Tap Series

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

SC-TL-RZ

Torqueless Roll Taps with Short Chamfer



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	Stainless steels ステンレス鋼	Aluminum alloy castings アルミ合金鋳物	Zinc alloy castings 亜鉛合金鋳物
15 ~ 30 (m/min)	15 ~ 30 (m/min)	15 ~ 25 (m/min)	10 ~ 25 (m/min)	15 ~ 30 (m/min)	15 ~ 30 (m/min)

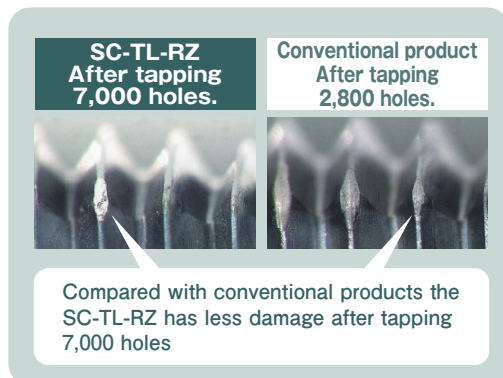
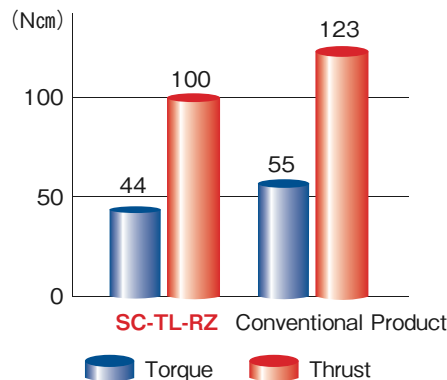
Product Features

- High quality internal threading with fewer burrs can be produced with better tool life.
- Roll form processing into materials with low ductility is now possible.
- Tool life with water soluble cutting fluid is increased.
- The SC-TL-RZ offers high speed processing into:
 - Stainless steel: SUS303, SUS304, SUS316, SUS440C
 - Alloy steel: SCM420
 - Carbon steel: S45C ~ S50C
 - Aluminum casting
 - Aluminum die casting

Tapping Data

Processing conditions [M3 × 0.5]

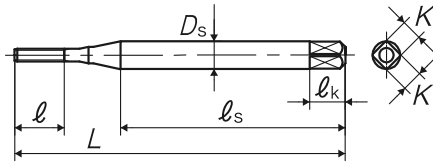
Workpiece Material	SCM440/32HRC
Bored Hole Size	φ2.8
Tapping Length	4.5mm
Tapping Speed	5m/min
Machinery Type	Tapping center
Tapping Fluid	Water soluble cutting fluid (10 to 1 dilution)



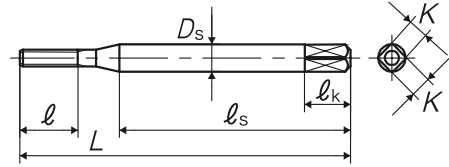
JIS

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

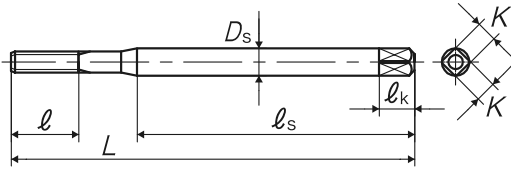
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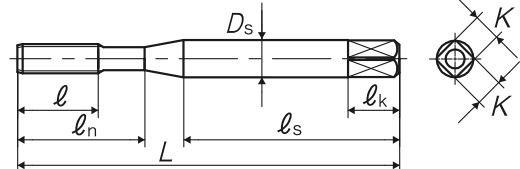
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Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M1 × 0.25	G4	SRZM41.0B1	1P	36	4.5	-	24	3	2.5	5	4	1	¥ 6,610
M1.2 × 0.25	G4	SRZM41.2B1	1P	36	4.5	-	24	3	2.5	5	4	1	¥ 6,040
M1.4 × 0.3	G4	SRZM41.4C1	1P	36	5.4	-	24	3	2.5	5	4	1	¥ 5,390
M1.4 × 0.2	G3	SRZM31.4A1	1P	36	3.6	-	24	3	2.5	5	4	1	¥ 8,090
M1.6 × 0.35	G4	SRZM41.6D1	1P	36	6.3	-	24	3	2.5	5	4	2	¥ 5,190
M1.6 × 0.2	G3	SRZM31.6A1	1P	36	3.6	-	24	3	2.5	5	4	2	¥ 7,840
M1.7 × 0.35	G4	SRZM41.7D1	1P	36	6.3	-	24	3	2.5	5	4	2	¥ 5,190
M2 × 0.4	G4	SRZM42.0E1	1P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,920
M2.5 × 0.45	G5	SRZM52.5F1	1P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,500
M2.6 × 0.45	G5	SRZM52.6F1	1P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,500
M3 × 0.5	G5	SRZM53.0G1	1P	46	9	14	26	4	3.2	6	4	4	¥ 4,090
M4 × 0.7	G6	SRZM64.0I1	1P	52	11	17	29	5	4	7	4	4	¥ 4,190
M5 × 0.8	G6	SRZM65.0K1	1P	60	13	22	33	5.5	4.5	7	4	4	¥ 4,470
M6 × 1	G6	SRZM66.0M1	1P	62	15	26	33	6	4.5	7	4	4	¥ 4,780
For Unified Threads													
No.2-56UNC	G4	SRZM4UN2E1	1P	42	8.1	-	27	3	2.5	5	4	3	¥ 5,290
No.4-40UNC	G5	SRZM5UN4H1	1P	46	9	14	25	4	3.2	6	4	4	¥ 4,920

Number of oil grooves : Metric thread: M2.6 and smaller = non, M3 and larger = 2
Unified thread: No.4 and smaller = non

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

⑥ Roll Tap Series

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

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

SURZ

SURZ

SU Roll Taps



Specification



Tapping Speeds depending on Materials

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

- Adopting the special form on tap's root, SURZ controls the minor diameter geometry of internal threads.
- Special lobe shape realizes low tapping torque.
- High efficiency can be obtained in thread forming of stainless steel parts.
- By adjusting bored hole size, you can adjust the minor diameter geometry of internal threads.

Tapping Data

Tapping condition [M2×0.4]

Work Material	SUS304
Bored Hole Size	ϕ 1.81, ϕ 1.82, ϕ 1.83, ϕ 1.84
Tapping Length	4mm (Blind hole)
Tapping Speed	3m/min
Feed	Rigid
Machine	Vertical Machining center
Tapping Fluid	Water soluble cutting fluid

POINT

In use, please select proper bored hole diameter.

Recommended bored hole diameter before tapping

Unit : mm

Size	Class	Recommended Bored Hole Size
M1 × 0.25	G4	0.90
M1.2 × 0.25	G4	1.10
M1.4 × 0.3	G4	1.28
M1.6 × 0.2	G3	1.52
M1.6 × 0.35	G4	1.46
M1.7 × 0.35	G4	1.56
M2 × 0.4	G4	1.82
M2.3 × 0.4	G4	2.12
M2.5 × 0.45	G4	2.30
M2.6 × 0.45	G5	2.40
M3 × 0.5	G5	2.77
No.2-56UNC	G4	1.98
No.4-40UNC	G5	2.55
No.6-32UNC	G5	3.14

*Recommended bored hole diameters shown in above table have been calculated by aiming at the thread engagement of 90% and by considering avoidance of tap breakage, based on our past tapping test experiences.

*Recommended bore hole diameter may change because material deformation can slightly change depending on material, hardness, dimension of workpiece and tapping condition.

Bored Hole Size	ϕ 1.84	ϕ 1.83
Cross Section Picture of Internal Threads		
Seam Shape	Normal seams remain.	Seams remain a little.
Minor Diameter	ϕ 1.64	ϕ 1.62

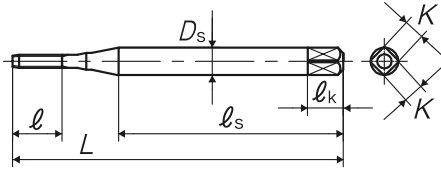
Bored Hole Size	ϕ 1.82	ϕ 1.81
Cross Section Picture of Internal Threads		
Seam Shape	Seams remain a little.	No seam remains.
Minor Diameter	ϕ 1.60	ϕ 1.59

M2×0.4 6H Internal Thread Minor Diameter and Tolerance	
Max.	1.679
Min.	1.567
Tolerance	0.112

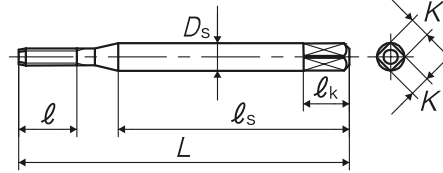
Think threads with
YAMAWA

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

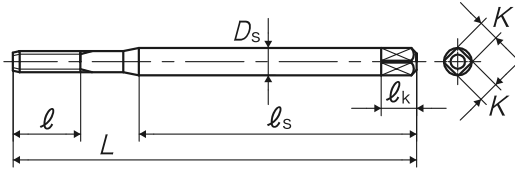
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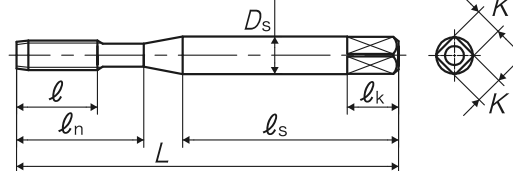
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TYPE:3



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Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE	MSRP
For Metric Threads													
M1 × 0.25	G4	SURZ41.0BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 6,140
M1.2 × 0.25	G4	SURZ41.2BB	2P	36	4.5	-	24	3	2.5	5	4	1	¥ 6,140
M1.4 × 0.3	G4	SURZ41.4CB	2P	36	5.4	-	24	3	2.5	5	4	1	¥ 5,760
M1.6 × 0.35	G4	SURZ41.6DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 5,540
M1.6 × 0.2	G3	SURZ31.6AB	2P	36	3.6	-	24	3	2.5	5	4	2	¥ 5,760
M1.7 × 0.35	G4	SURZ41.7DB	2P	36	6.3	-	24	3	2.5	5	4	2	¥ 5,540
M2 × 0.4	G4	SURZ42.0EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,960
M2.3 × 0.4	G4	SURZ42.3EB	2P	42	7.2	-	27	3	2.5	5	4	3	¥ 4,820
M2.5 × 0.45	G4	SURZ42.5FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,640
M2.6 × 0.45	G5	SURZ52.6FB	2P	46	8.1	14	29	3	2.5	5	4	4	¥ 4,640
M3 × 0.5	G5	SURZ53.0GB	2P	46	9	14	26	4	3.2	6	4	4	¥ 4,570
For Unified Threads													
No.2-56UNC	G4	SURZ4UN2EB	2P	42	8.1	-	27	3	2.5	5	4	3	¥ 5,370
No.4-40UNC	G5	SURZ5UN4HB	2P	46	9	14	25	4	3.2	6	4	4	¥ 5,210
No.6-32UNC	G5	SURZ5UN6JB	2P	52	11	17	27	5	4	7	4	4	¥ 4,910

Number of oil grooves : Metric thread: M2.6 and smaller = non, M3 = 2
Unified thread: No.4 and smaller = non, No.6 = 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

⑥ Roll Tap Series

JIS

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

MS+RS

Roll Taps for Miniature Threads



Specification



Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 ~5 (m/min)	Stainless steels ステンレス鋼 ~3 (m/min)	Brass 黄銅 ~5 (m/min)	Wrought aluminum アルミ圧延材 ~5 (m/min)
Aluminum alloy castings アルミ合金鋳物 ~5 (m/min)	Zinc alloy castings 亜鉛合金鋳物 ~5 (m/min)		

HPsRZ

High Performance Roll Taps for Miniature Threads



Specification



Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 ~5 (m/min)	Medium carbon steels 中炭素鋼 ~5 (m/min)	High carbon steels 高炭素鋼 ~5 (m/min)	Stainless steels ステンレス鋼 ~3 (m/min)
Wrought aluminum アルミ圧延材 ~5 (m/min)	Titanium alloys チタン合金 ~3 (m/min)		

Product Features

- Improved tool rigidity from new blank shape that offers torsional strength and shank accuracy.
- Markings that were on the shanks outside diameter have been transferred to the square part to improve circularity.
- New thread portion offers improvements in the accuracy of the "GS" class of internal thread tapping.

Tapping Data

Tapping Conditions [S0.8×0.2]

	MS+RS	HPsRZ
Types of Taps	Conventional product	Competitor
Surface Treatment	—	TiCN
Workpiece Material	SUS304 (88HRB)	
Bore Diameter	φ0.73	
Tapping Length	1.2mm (1.5D)	
Tapping Speed	4m/min	8m/min
Machinery Type	CNC tapping center	
Tapping Fluid	Non-water soluble cutting fluid	

Recommended hole diameter (reference value).

Unit: mm

Size	Limit	4H5 Thread Limit	
		Max.	Min.
S0.6 × 0.15	GS 2	0.55	0.54
S0.7 × 0.175	GS 3	0.64	0.62
S0.8 × 0.2	GS 3	0.73	0.71
S0.9 × 0.225	GS 4	0.82	0.80

New thread GS class accuracy

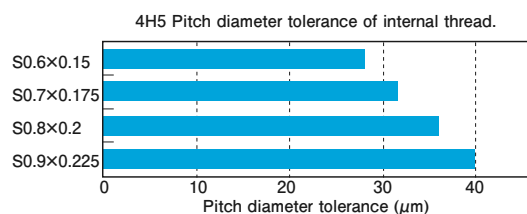
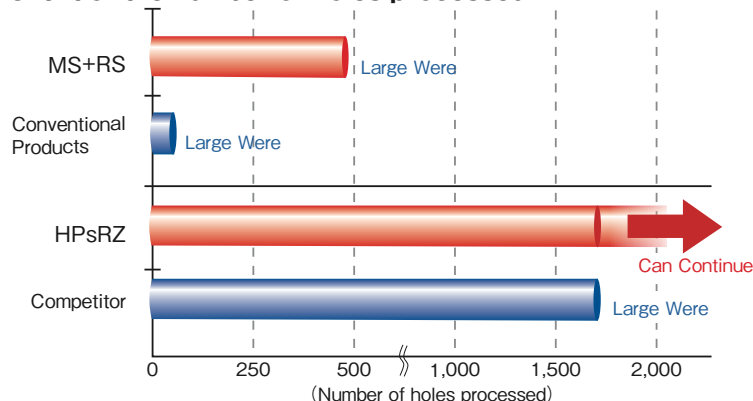


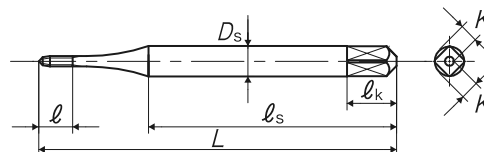
Chart of the number of holes processed.



* Tool life is judged by the threads major diameter wear width.

MS+RS Roll Taps for Miniature Threads

TYPE: 1



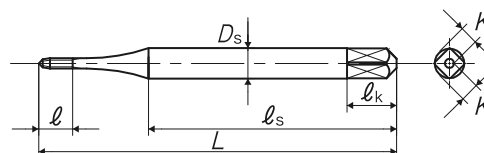
Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	l (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	Lobe	TYPE	MSRP
For Miniature Threads												
S0.6 × 0.15	GS2	MSP20.6-B	2P	36	2.5	25	3	2.5	6	4	1	¥ 6,870 ※
S0.7 × 0.175	GS3	MSP30.7-B	2P	36	2.5	25	3	2.5	6	4	1	¥ 5,970 ※
S0.8 × 0.2	GS3	MSP30.8-B	2P	36	3	25	3	2.5	6	4	1	¥ 5,570 ※
S0.9 × 0.225	GS4	MSP40.9-B	2P	36	3	25	3	2.5	6	4	1	¥ 5,570 ※

HPsRZ High Performance Roll Taps for Miniature Threads

TYPE: 1



Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	l (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	Lobe	TYPE	MSRP
For Miniature Threads												
S0.6 × 0.15	GS2	HPS20.6-B	2P	36	2.5	25	3	2.5	6	4	1	¥ 8,890 ※
S0.7 × 0.175	GS3	HPS30.7-B	2P	36	2.5	25	3	2.5	6	4	1	¥ 7,740 ※
S0.8 × 0.2	GS3	HPS30.8-B	2P	36	3	25	3	2.5	6	4	1	¥ 7,230 ※
S0.9 × 0.225	GS4	HPS40.9-B	2P	36	3	25	3	2.5	6	4	1	¥ 7,230 ※

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

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

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

JIS

⑥-64

⑥ Roll Tap Series

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

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

R-Y

Roll Taps for Thin Soft Structural Steel Sheets



Specification

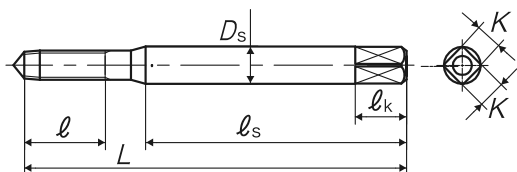


Tapping Speeds depending on Materials

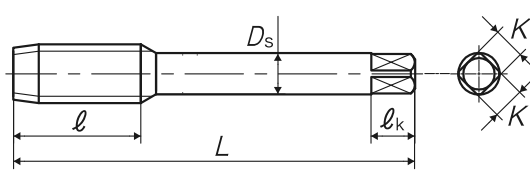


■ For tapping general fasteners made from such thin steel sheets as SPC and SPH, and from such soft steels as under SS400 and S20C.

TYPE:1



TYPE:2



Segment : 1J

Size	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE	MSRP
For Metric Threads												
M2 × 0.4	RY2.0E3	3P	42	7	-	31	3	2.5	5	4	1	¥ 1,670
M2.5 × 0.45	RY2.5F3	3P	44	8	-	33	3	2.5	5	4	1	¥ 1,470
M2.6 × 0.45	RY2.6F3	3P	44	8	-	33	3	2.5	5	4	1	¥ 1,470
M3 × 0.5	RY3.0G3	3P	46	9	-	33	4	3.2	6	4	1	¥ 1,330
M4 × 0.7	RY4.0I3	3P	52	11	-	36	5	4	7	4	1	¥ 1,340
M5 × 0.8	RY5.0K3	3P	60	12	-	43	5.5	4.5	7	4	1	¥ 1,460
M6 × 1	RY6.0M3	3P	62	15	-	44	6	4.5	7	4	1	¥ 1,600
M8 × 1.25	RY8.0N3	3P	70	18	-	-	6.2	5	8	4	2	¥ 2,520

Number of oil grooves : non

• Please use CPR-Y for controlling of bored holes. (For CPR-Y, refer to product page ⑦-81)

JIS

⑥-65

Think threads with
YAMAWA

R-D

Roll Taps for General Purpose



Specification



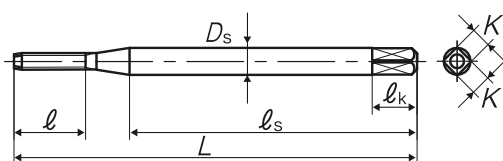
■ R-D is the forming tap suitable for steel materials.

Tapping Speeds depending on Materials

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

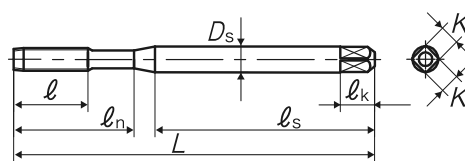
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DIN371



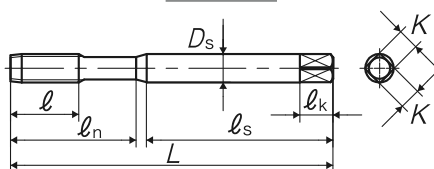
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DIN371



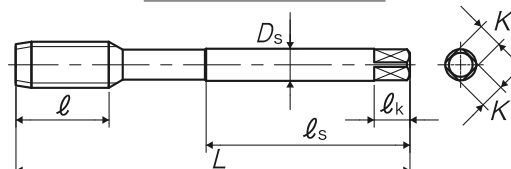
TYPE:3

DIN371



TYPE:4

DIN376/DIN5156



Segment : 1J (G=1H)

Size	Class	Code	Chamfer	L (mm)	l (mm)	l _n (mm)	l _s (mm)	D _s (mm)	K (mm)	l _k (mm)	Lobe	TYPE
For Metric Threads												
M2 × 0.4	ISO2X	RD2.0EBNEBB	2P	45	8	-	32	2.8	2.1	5	4	1
M2.5 × 0.45	ISO2X	RD2.5FBNEBB	2P	50	8	15	33	2.8	2.1	5	4	2
M3 × 0.5	ISO2X	RD3.0GBNEBB	2P	56	9	18	34	3.5	2.7	6	4	2
M3.5 × 0.6	ISO2X	RD3.5HBNEBB	2P	56	11	20	32	4	3	6	4	2
M4 × 0.7	ISO2X	RD4.0IBNEBB	2P	63	13	21	38	4.5	3.4	6	4	2
M5 × 0.8	ISO2X	RD5.0KBNEBB	2P	70	14	25	39	6	4.9	8	4	2
M6 × 1	ISO2X	RD6.0MBNEBB	2P	80	15	30	45	6	4.9	8	4	2
M8 × 1.25	ISO2X	RD8.0NBNEBB	2P	90	19	35	47	8	6.2	9	6	3
M10 × 1.5	ISO2X	RD10.0OBNEBB	2P	100	23	39	52.5	10	8	11	8	3
M12 × 1.75	ISO2X	RG012PBNEBB	2P	110	26	-	56	9	7	10	8	4
M14 × 2	ISO2X	RG014QBNEBB	2P	110	26	-	56	11	9	12	8	4
M16 × 2	ISO2X	RG016QBNEBB	2P	110	26	-	56	12	9	12	8	4
For G Threads												
G 1/8-28	-	RVG0026NEBB	2P	90	19	-	46	7	5.5	8	8	4
G 1/4-19	-	RVG0047NEBB	2P	100	21	-	51	11	9	12	8	4
G 3/8-19	-	RVG0067NEBB	2P	100	21	-	51	12	9	12	8	4

Number of oil grooves: M2.5 and smaller = non,
M3~M6 = 4, M8 = 3, M10 and larger = 4
For M6 and smaller, external centers of 2P chamfer taps are removed.

⑥ Roll Tap Series

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

R-D

Roll Taps for General Purpose, Coated



Specification



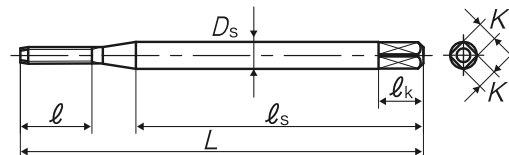
■ R-D is the forming tap suitable for steel materials.

Tapping Speeds depending on Materials

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

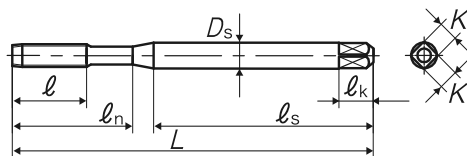
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DIN371



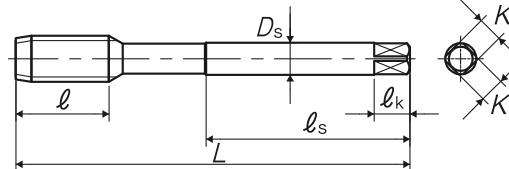
TYPE: 2

DIN371



TYPE: 3

DIN376/DIN5156



Segment : 1J (G=1H)

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	Lobe	TYPE
For Metric Threads												
M2 × 0.4	ISO2X	93532.0BTI	2P	45	8	-	32	2.8	2.1	5	4	1
M2.5 × 0.45	ISO2X	93532.5BTI	2P	50	8	15	33	2.8	2.1	5	4	2
M3 × 0.5	ISO2X	93533.0BTI	2P	56	9	18	34	3.5	2.7	6	4	2
M3.5 × 0.6	ISO2X	93533.5BTI	2P	56	11	20	32	4	3	6	4	2
M4 × 0.7	ISO2X	93534.0BTI	2P	63	13	21	38	4.5	3.4	6	4	2
M5 × 0.8	ISO2X	93535.0BTI	2P	70	14	25	39	6	4.9	8	4	2
M6 × 1	ISO2X	93536.0BTI	2P	80	15	30	45	6	4.9	8	4	2
M8 × 1.25	ISO2X	93538.0BTI	2P	90	19	35	47	8	6.2	9	6	2
M10 × 1.5	ISO2X	9353010BTI	2P	100	23	39	52.5	10	8	11	8	2
M12 × 1.75	ISO2X	9353012BTI	2P	110	26	-	56	9	7	10	8	3
M14 × 2	ISO2X	9353014BTI	2P	110	26	-	56	11	9	12	8	3
M16 × 2	ISO2X	9353016BTI	2P	110	26	-	56	12	9	12	8	3
For G Threads												
G 1/8-28	-	9953R02TI	2P	90	19	-	46	7	5.5	8	8	3
G 1/4-19	-	9953R04TI	2P	100	21	-	51	11	9	12	8	3
G 3/8-19	-	9953R06TI	2P	100	21	-	51	12	9	12	8	3

Number of oil grooves: M2.5 and smaller = non,
M3 ~ M6 = 4, M8 = 3, M10 and larger = 4
For M6 and smaller, external centers of 2P chamfer taps are removed.

DIN

⑥-67

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	ℓ _n	ℓ _s	D _s	K	ℓ _k

R-D

Roll Taps for General Purpose, Coated



Specification



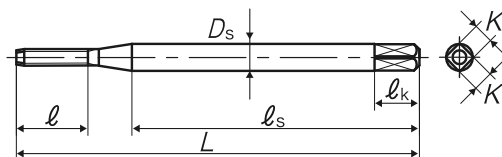
■ R-D is the forming tap suitable for steel materials.

Tapping Speeds depending on Materials

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

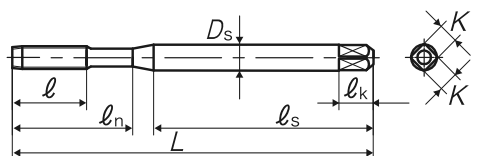
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DIN371



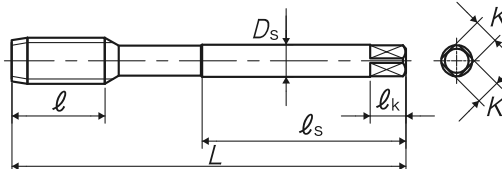
TYPE: 2

DIN371



TYPE: 3

DIN376/DIN5156



Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	Lobe	TYPE
For Metric Threads												
M2 × 0.4	ISO2X	93532.0BTC	2P	45	8	-	32	2.8	2.1	5	4	1
M2.5 × 0.45	ISO2X	93532.5BTC	2P	50	8	15	33	2.8	2.1	5	4	2
M3 × 0.5	ISO2X	93533.0BTC	2P	56	9	18	34	3.5	2.7	6	4	2
M3.5 × 0.6	ISO2X	93533.5BTC	2P	56	11	20	32	4	3	6	4	2
M4 × 0.7	ISO2X	93534.0BTC	2P	63	13	21	38	4.5	3.4	6	4	2
M5 × 0.8	ISO2X	93535.0BTC	2P	70	14	25	39	6	4.9	8	4	2
M6 × 1	ISO2X	93536.0BTC	2P	80	15	30	45	6	4.9	8	4	2
M8 × 1.25	ISO2X	93538.0BTC	2P	90	19	35	47	8	6.2	9	6	2
M10 × 1.5	ISO2X	9353010BTC	2P	100	23	39	52.5	10	8	11	8	2
M12 × 1.75	ISO2X	9353012BTC	2P	110	26	-	56	9	7	10	8	3
M14 × 2	ISO2X	9353014BTC	2P	110	26	-	56	11	9	12	8	3
M16 × 2	ISO2X	9353016BTC	2P	110	26	-	56	12	9	12	8	3

Number of oil grooves: M2.5 and smaller = non,

M3 ~ M6 = 4, M8 = 3, M10 and larger = 4

For M6 and smaller, external centers of 2P chamfer taps are removed.

Note: Available while supplies last.

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

