

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

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

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]

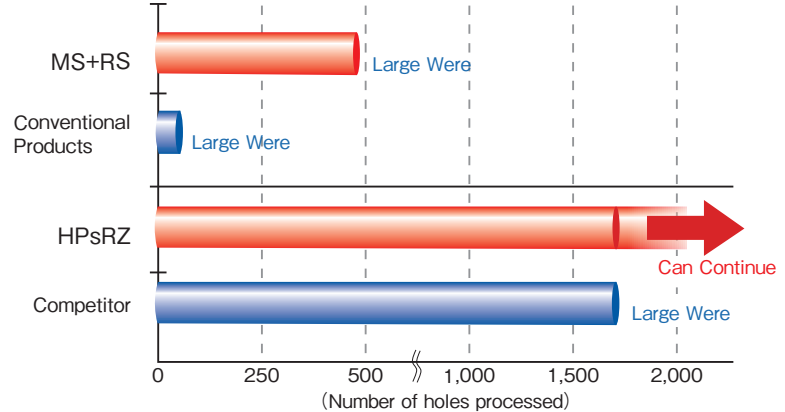
	MS+RS	HPsRZ
Types of Taps	Conventional product	Competitor
Surface Treatment	—	TiCN
Workpiece Material	SUS304 (88HRB)	
Bore Diameter	φ0.73	
Tapping Length	1.2mm (1.5D)	
Tapping Speed	4m/min	8m/min
Machinery Type	CNC tapping center	
Tapping Fluid	Non-water soluble cutting fluid	

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

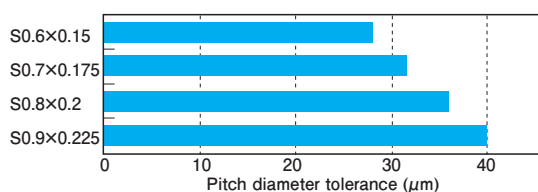
Chart of the number of holes processed.



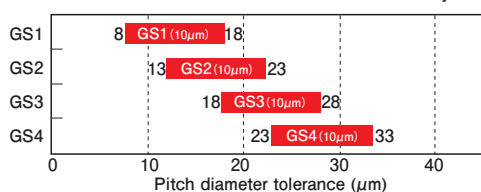
* Tool life is judged by the threads major diameter wear width.

New thread GS class accuracy

4H5 Pitch diameter tolerance of internal thread.



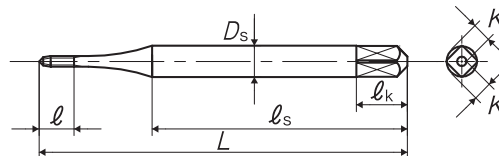
Pitch diameter tolerance of GS class accuracy.



Overall length	Thread length	Shank length	Shank dia.	Size of square	Length of square
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MS+RS Roll Taps for Miniature Threads

TYPE: 1



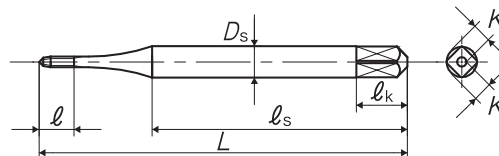
Recommended class

Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (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)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (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 ※