



Spiral Fluted Taps
(for blind hole)

AU+SP

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



Spiral Fluted Taps
(for through hole)

Spiral Pointed Taps
(for through hole)

Hand Taps

Cemented Carbide Taps

Roll Taps

Special Thread Taps
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools

Recommended Tapping Speeds depending on Materials

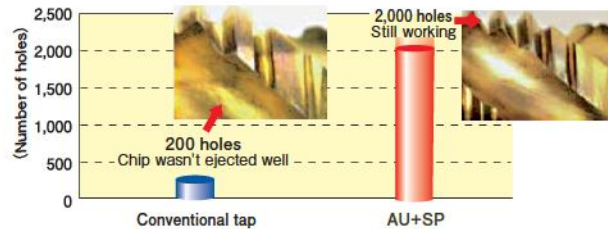
Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼
10~20 (m/min)	10~20 (m/min)	10~20 (m/min)	10~20 (m/min)
Stainless steels ステンレス鋼	Aluminum alloy castings アルミ合金鋳物	Zinc alloy castings 亜鉛合金鋳物	
5~10 (m/min)	20~30 (m/min)	20~30 (m/min)	

For icon explanation, refer to P.24

Tapping data

Tapping condition (M6×1)

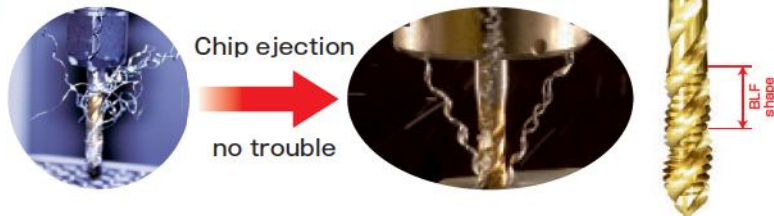
Work material	SCM440
Tapping speed	10m/min
Hole diameter	φ5.0
Tapping length	9mm, blind hole
Machine	Machining center vertical type (Floating holder used)
Tapping fluid	Water soluble cutting oil (Chlorine-free, 20 fold dilution)



Product features

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

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



Change of marking position from shank into square portion

Laser marking can roughen the shank surface.

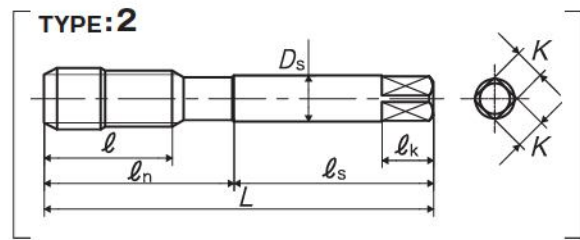
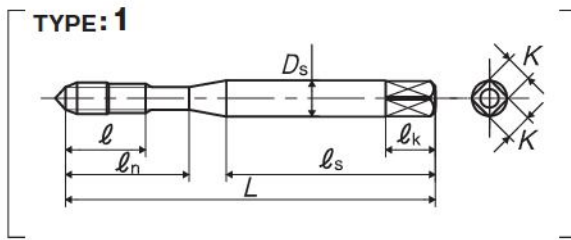
In order to keep high accuracy of shank circularity and diameter, marking has been transferred from shank to square portion.



For wide range of materials

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

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



Segment : 1C

Size	Class	Code	Chamfer	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	No. of flutes	Type	Stock
For Metric Threads													
M2 × 0.4	P2	VSAPQ2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	1	○
M2.5 × 0.45	P2	VSAPQ2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	1	○
M2.6 × 0.45	P2	VSAPQ2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	1	○
M3 × 0.5	P2	VSAPQ3.0G	2.5P	46	9	14	26	4	3.2	6	3	1	◎
M4 × 0.7	P2	VSAPQ4.0I	2.5P	52	11	17	29	5	4	7	3	1	◎
M5 × 0.8	P2	VSAPQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	1	◎
M6 × 1	P2	VSAPQ6.0M	2.5P	62	15	26	33	6	4.5	7	3	1	◎
M8 × 1.25	P3	VSAPR8.0N	2.5P	70	19	-	36	6.2	5	8	3	2	◎
M8 × 1	P3	VSAPR8.0M	2.5P	70	19	-	36	6.2	5	8	3	2	○
M10 × 1.5	P3	VSAPR010O	2.5P	75	23	-	38	7	5.5	8	4	2	◎
M10 × 1.25	P3	VSAPR010N	2.5P	75	23	-	38	7	5.5	8	4	2	◎
M10 × 1	P3	VSAPR010M	2.5P	75	23	-	38	7	5.5	8	4	2	○
M12 × 1.75	P3	VSAPR012P	2.5P	82	26	-	42	8.5	6.5	9	4	2	◎
M12 × 1.5	P3	VSAPR012O	2.5P	82	26	-	42	8.5	6.5	9	4	2	◎
M12 × 1.25	P3	VSAPR012N	2.5P	82	26	-	42	8.5	6.5	9	4	2	◎

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