

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

- ① 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



## 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)

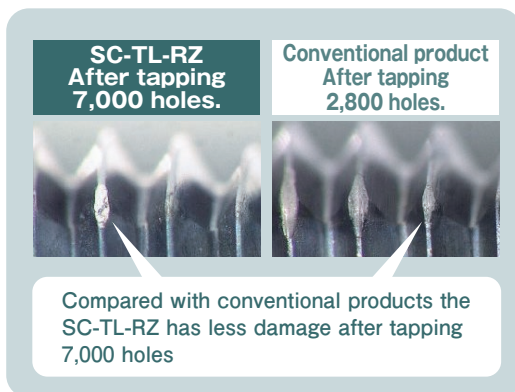
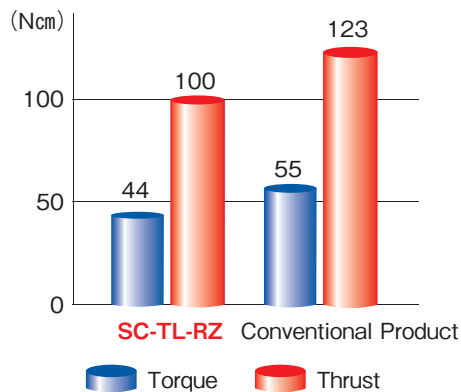
### Product Features

- 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

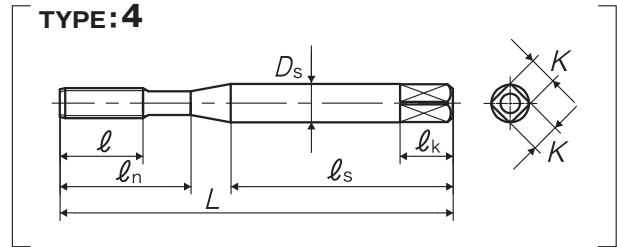
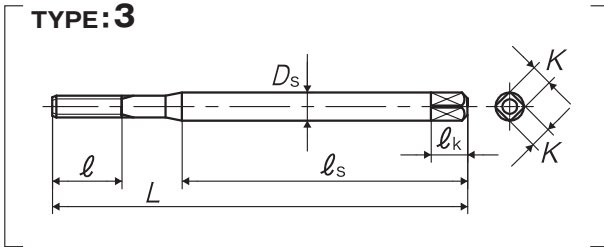
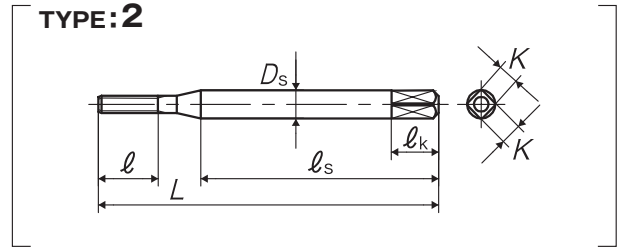
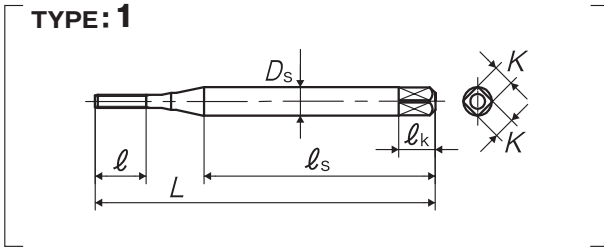
### Tapping Data

#### 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)



Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓ	ℓ <sub>n</sub>	ℓ <sub>s</sub>	D <sub>s</sub>	K	ℓ <sub>k</sub>



  Recommended class  
Segment : 1J

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ <sub>n</sub> (mm)	ℓ <sub>s</sub> (mm)	D <sub>s</sub> (mm)	K (mm)	ℓ <sub>k</sub> (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

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- 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/Metal Surgical Instruments