

Overall length	Thread length	Position on basic dia.	Shank length	Shank dia.	Size of square	Length of square
L	ℓ	ℓg	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

⑧-11

Z-PRO

PMST OX Rc

Z-PRO

Straight Fluted Taps for Taper Pipe Threads, for High Hardness Materials



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)	Alloy steels 合金鋼 ~5 (m/min)	Thermal refined steels 調質鋼 25~35HRC ~3 (m/min)	Thermal refined steels 調質鋼 35~45HRC ~3 (m/min)	Tool steels 工具鋼 ~5 (m/min)	Cast steels 鑄鋼 ~5 (m/min)
Cast irons 鑄鉄 ~5 (m/min)	Ductile cast irons 強靱鑄鉄 ~5 (m/min)	Aluminum alloy castings アルミ合金鑄物 ~7 (m/min)	Magnesium alloy die castings マグネシウム合金鑄物 ~7 (m/min)	Zinc alloy castings 亜鉛合金鑄物 ~7 (m/min)	Brass 黄銅 ~7 (m/min)	Brass castings 黄銅鑄物 ~7 (m/min)	

Product Features

- Proper tool projection length is secured, achieving an excellent supply of cutting fluid.
- Ideal for tapping hard steels from 30 to 45 HRC, such as plastic die steels.

Tapping Data

Tapping conditions

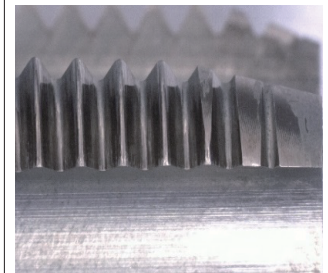
Workpiece Material	NAK55 (40HRC)
Tapping Speed	3m/min
M a c h i n e	Machining center (Vertical)
H o l d e r	With tension and compression
Tapping Fluid	Non-water soluble cutting oil

PMST OX Rc1/4-19 (After 10 holes)

Excellent internal thread



Less damage on the edge



Comparison of Rc and PT tap dimensions

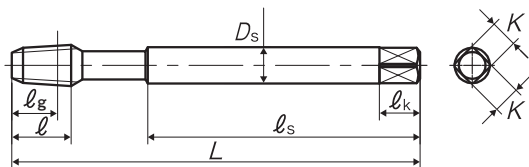
Comparison table of tap dimensions between PMST OX Rc and "SP-PT (long thread type)"

Size	PMST OX Rc			
	Overall length L (mm)	Thread length ℓ (mm)	Position on basic dia. ℓg (mm)	Shank dia. Ds (mm)
Rc 1/16-28	90	14	10.1	8
Rc 1/8-28	90	15	10.1	8
Rc 1/4-19	100	19	15	11
Rc 3/8-19	100	21	15.4	14
Rc 1/2-14	125	26	20.5	18
Rc 3/4-14	140	28	21.8	23
Rc 1 -11	160	33	26	26

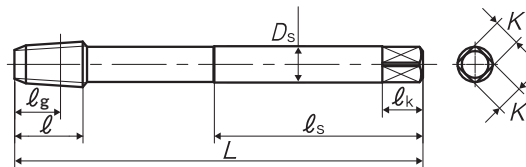
Size	SP-PT (Long (ℓg) Type)			
	Overall length L (mm)	Thread length ℓ (mm)	Position on basic dia. ℓg (mm)	Shank dia. Ds (mm)
PT 1/16-28	55	19	13	8
PT 1/8-28	55	19	13	8
PT 1/4-19	62	28	21	11
PT 3/8-19	65	28	21	14
PT 1/2-14	80	35	25	18
PT 3/4-14	85	35	25	23
PT 1 -11	95	45	32	26

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

TYPE:1



TYPE:2



Segment : 1H

Size	Code	Chamfer	Basic major dia (mm)	L (mm)	ℓ (mm)	ℓg (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
For Pipe Threads													
Rc 1/16-28	TJRC010DPX	C(2.5P)	7.723	90	14	10.1	60	8	6	9	4	1	¥ 7,810 [※]
Rc 1/8-28	TJRC020DPX	C(2.5P)	9.728	90	15	10.1	46	8	6	9	4	2	¥ 7,810 [※]
Rc 1/4-19	TJRC040DPX	C(2.5P)	13.157	100	19	15.0	51	11	9	12	4	2	¥ 11,400 [※]
Rc 3/8-19	TJRC060DPX	C(2.5P)	16.662	100	21	15.4	51	14	11	14	4	2	¥ 18,500 [※]
Rc 1/2-14	TJRC080DPX	C(2.5P)	20.955	125	26	20.5	64	18	14	17	4	2	¥ 30,100 [※]
Rc 3/4-14	TJRC120DPX	C(2.5P)	26.441	140	28	21.8	71	23	17	20	4	2	¥ 46,000 [※]
Rc 1 -11	TJRC160DPX	C(2.5P)	33.249	160	33	26.0	82	26	21	24	5	2	¥ 79,700 [※]