	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

Z-PRO
MHSL

Z-PRO Spiral Fluted Taps for Carbon Steels of Medium Hardness, Through Hole Use (with LH Spiral Flutes)

Specification

HSS-Co	Coating		Synchronized	<2D

■ Suitable for through hole tapping of medium hardness steels such as forgings of high carbon steels and thermal refined steels (25HRC～35HRC)

Tapping Speeds depending on Materials

M1.8～M5×0.5

| 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	Thermal refined steels 調質鋼	Tool steels 工具鋼
2~16 (m/min)	2~16 (m/min)	2~16 (m/min)	2~16 (m/min) 25～35HRC	1~12 (m/min) 35～45HRC	1~12 (m/min)

M6～M16

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	Tool steels 工具鋼
10~20 (m/min)	10~20 (m/min)	10~20 (m/min)	10~20 (m/min) 25～35HRC	5~15 (m/min)

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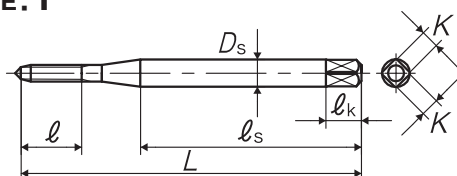
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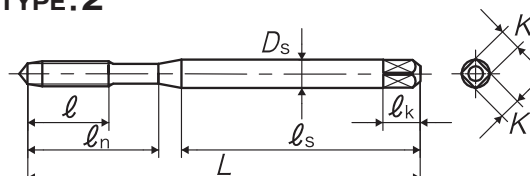
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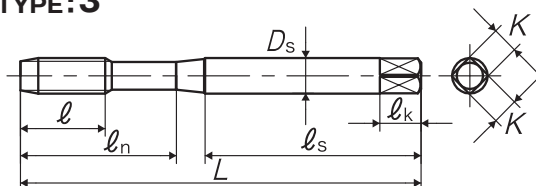
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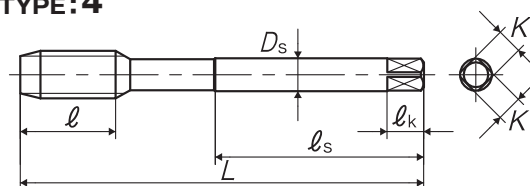
Segment : 1T

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
						For Metric threads						
M2 × 0.4	D3	5109101021	5P	1.772	0.314	-	1.161	0.141	0.11	0.187	2	1
M2.5 × 0.45	D4	5109101029	5P	2.205	0.354	0.693	1.28	0.141	0.11	0.187	3	2
M3 × 0.5	D4	5109101035	5P	2.205	0.433	0.736	1.339	0.141	0.11	0.187	3	2
M3.5 × 0.6	D4	5109101038	5P	2.205	0.433	0.748	1.339	0.141	0.11	0.187	3	2
M4 × 0.7	D5	5109101042	5P	2.48	0.512	0.815	1.535	0.168	0.131	0.25	3	2
M4.5 × 0.75	D5	5109101045	5P	2.756	0.551	0.945	1.654	0.194	0.152	0.25	3	5
M5 × 0.8	D5	5109101049	5P	2.756	0.551	0.984	1.654	0.194	0.152	0.25	3	2
M5 × 0.5	D4	5109101051	5P	2.756	0.354	0.984	1.654	0.194	0.152	0.25	3	2
M6 × 1	D5	LS6.0M5FCL5	5P	3.15	0.591	1.181	1.713	0.255	0.191	0.312	3	2

Think threads with YAMAWA

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

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M8 × 1.25	D5	LS8.0N5FCL5	5P	3.543	0.748	1.378	1.831	0.318	0.238	0.375	3	3
M10 × 1.5	D6	LS010O6FCL5	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M10 × 1.25	D6	LS010N6FCL5	5P	3.937	0.906	1.535	2.126	0.381	0.286	0.437	3	3
M12 × 1.75	D7	LS012P7FCL5	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	4	4
M12 × 1.5	D6	LS012O6FCL5	5P	4.331	1.024	-	2.205	0.367	0.275	0.437	4	4
M12 × 1.25	D6	LS012N6FCL7	7P	4.331	1.024	-	2.205	0.367	0.275	0.437	4	4
M14 × 1.5	D7	LS014O7FCL7	7P	4.331	1.024	-	2.205	0.429	0.322	0.5	4	4
M16 × 1.5	D7	LS016O7FCL7	7P	4.331	1.024	-	2.205	0.48	0.36	0.562	4	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

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

Think threads with
YAMAWA