

# 1 Spiral Fluted Tap Series for blind hole

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>

- ANSI
- 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

# ANSI

## Z-PRO VUSP



### Z-PRO Coated Spiral Fluted Taps

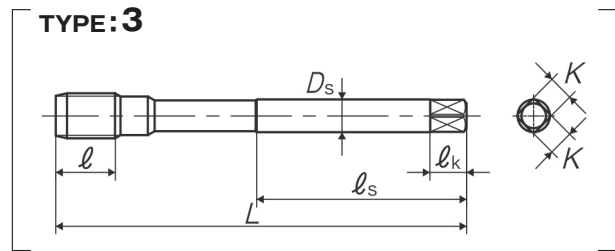
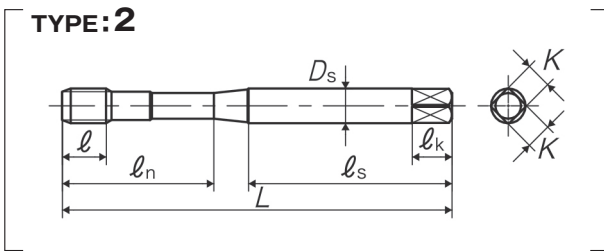
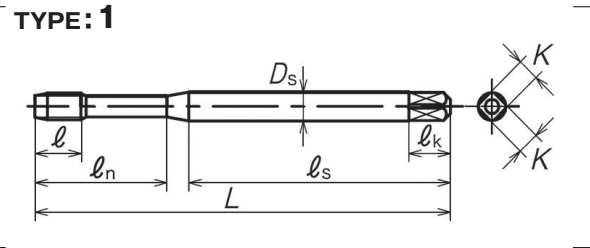
#### Specification



- Durability is improved by premium powder HSS and special coating.
- Chip ejection efficiency is improved and cutting resistance is reduced by the unique cutting edge shape, achieving a good internal thread and long tool life.

#### Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼 <b>10~20</b> (m/min)	Medium carbon steels 中炭素鋼 <b>10~30</b> (m/min)	High carbon steels 高炭素鋼 <b>10~30</b> (m/min)	Alloy steels 合金鋼 <b>10~20</b> (m/min)	Stainless steels ステンレス鋼 <b>3~10</b> (m/min)	Tool steels 工具鋼 <b>5~10</b> (m/min)	Ductile cast irons 強靱鑄鉄 <b>10~30</b> (m/min)
Wrought aluminum アルミ圧延材 <b>10~30</b> (m/min)	Aluminum alloy castings アルミ合金鋳物 <b>10~35</b> (m/min)					



Segment : 1D

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓ <sub>n</sub> (inch)	ℓ <sub>s</sub> (inch)	D <sub>s</sub> (inch)	K (inch)	ℓ <sub>k</sub> (inch)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	D4	5101101035	2.5P	2.205	0.197	0.736	1.339	0.141	0.11	0.187	3	1
M3 × 0.35	D4	5101101036	2.5P	2.205	0.197	0.736	1.339	0.141	0.11	0.187	3	1
M4 × 0.7	D5	5101101042	2.5P	2.48	0.276	0.815	1.535	0.168	0.131	0.25	3	1
M4 × 0.5	D4	5101101043	2.5P	2.48	0.197	0.815	1.535	0.168	0.131	0.25	3	1
M5 × 0.8	D5	5101101049	2.5P	2.756	0.354	0.984	1.654	0.194	0.152	0.25	3	1
M5 × 0.5	D4	5101101051	2.5P	2.756	0.236	0.984	1.654	0.194	0.152	0.25	3	1
M6 × 1	D6	5101101055	2.5P	3.15	0.433	1.181	1.713	0.255	0.191	0.312	3	1
M6 × 0.75	D6	5101101056	2.5P	3.15	0.315	1.181	1.713	0.255	0.191	0.312	3	1
M6 × 0.5	D4	5101101057	2.5P	3.15	0.315	1.181	1.713	0.255	0.191	0.312	3	1
M8 × 1.25	D7	5101101064	2.5P	3.543	0.472	1.378	1.831	0.318	0.238	0.375	3	2
M8 × 1	D6	5101101065	2.5P	3.543	0.472	1.378	1.831	0.318	0.238	0.375	3	2
M10 × 1.5	D8	5101101078	2.5P	3.937	0.512	1.535	2.126	0.381	0.286	0.437	3	2
M10 × 1.25	D6	5101101079	2.5P	3.937	0.512	1.535	2.126	0.381	0.286	0.437	3	2
M10 × 1	D6	5101101080	2.5P	3.937	0.512	1.535	2.126	0.381	0.286	0.437	3	2
M12 × 1.75	D8	5101101088	2.5P	4.331	0.591	-	2.205	0.367	0.275	0.437	3	3
M12 × 1.5	D7	5101101089	2.5P	4.331	0.591	-	2.205	0.367	0.275	0.437	3	3

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

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

ANSI

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/  
Metal Surgical Instruments ⑫

ANSI ①-10

Size	Class	Code	Chamfer	L (inch)	ℓ (inch)	ℓn (inch)	ℓs (inch)	Ds (inch)	K (inch)	ℓk (inch)	No. of flutes	TYPE
M12 × 1.25	D7	5101101090	2.5P	4.331	0.591	-	2.205	0.367	0.275	0.437	3	3
M14 × 2	D9	5101101100	2.5P	4.331	0.709	-	2.205	0.429	0.322	0.5	3	3
M14 × 1.5	D8	5101101102	2.5P	4.331	0.551	-	2.205	0.429	0.322	0.5	3	3
M16 × 2	D9	5101101114	2.5P	4.331	0.709	-	2.205	0.48	0.36	0.562	3	3
M16 × 1.5	D8	5101101116	2.5P	4.331	0.551	-	2.205	0.48	0.36	0.562	3	3
M18 × 2.5	D9	5101101128	2.5P	4.921	0.787	-	2.52	0.542	0.406	0.625	4	3
M18 × 1.5	D8	5101101130	2.5P	4.921	0.551	-	2.52	0.542	0.406	0.625	3	3
M20 × 2.5	D9	5101101141	2.5P	5.512	0.787	-	2.795	0.652	0.489	0.687	4	3
M20 × 1.5	D8	5101101144	2.5P	5.512	0.551	-	2.795	0.652	0.489	0.687	3	3
M22 × 2.5	D9	5101101156	2.5P	5.512	0.787	-	2.795	0.697	0.523	0.75	4	3
M22 × 1.5	D8	5101101158	2.5P	5.512	0.551	-	2.795	0.697	0.523	0.75	3	3
M24 × 3	D10	5101101167	2.5P	6.299	0.984	-	3.228	0.76	0.57	0.75	4	3
M24 × 1.5	D8	5101101170	2.5P	6.299	0.709	-	3.228	0.76	0.57	0.75	3	3
For Unified Threads												
No.5-40UNC	GH2	5101103021	2.5P	2.205	0.197	0.736	1.339	0.141	0.11	0.187	2	1
No.5-44UNF	GH2	5101103022	2.5P	2.205	0.197	0.736	1.339	0.141	0.11	0.187	2	1
No.6-32UNC	GH2	5101103023	2.5P	2.205	0.276	0.748	1.339	0.141	0.11	0.187	2	1
No.6-40UNF	GH2	5101103024	2.5P	2.205	0.276	0.748	1.339	0.141	0.11	0.187	2	1
No.8-32UNC	GH3	5101103029	2.5P	2.48	0.276	0.827	1.535	0.168	0.131	0.25	2	1
No.8-36UNF	GH3	5101103030	2.5P	2.48	0.276	0.827	1.535	0.168	0.131	0.25	2	1
No.10-24UNC	GH3	5101103039	2.5P	2.756	0.354	0.945	1.654	0.194	0.152	0.25	2	1
No.10-32UNF	GH3	5101103041	2.5P	2.756	0.354	0.945	1.654	0.194	0.152	0.25	2	1
No.12-24UNC	GH3	5101103047	2.5P	3.15	0.354	0.984	1.953	0.22	0.165	0.281	2	1
No.12-28UNF	GH3	5101103048	2.5P	3.15	0.354	0.984	1.953	0.22	0.165	0.281	2	1
1/4-20UNC	GH3	5101103058	2.5P	3.15	0.433	1.181	1.713	0.255	0.191	0.312	2	1
1/4-20UNC	GH5	5101303058	2.5P	3.15	0.433	1.181	1.713	0.255	0.191	0.312	2	1
1/4-28UNF	GH3	5101103062	2.5P	3.15	0.433	1.181	1.713	0.255	0.191	0.312	2	1
1/4-28UNF	GH5	5101303062	2.5P	3.15	0.433	1.181	1.713	0.255	0.191	0.312	2	1
5/16-18UNC	GH5	5101103071	2.5P	3.543	0.472	1.378	1.831	0.318	0.238	0.375	3	2
3/8-16UNC	GH5	5101103082	2.5P	3.937	0.512	1.535	2.028	0.381	0.286	0.437	3	2
7/16-14UNC	GH5	5101103098	2.5P	3.937	0.512	-	2.008	0.323	0.242	0.406	3	3
1/2-13UNC	GH5	5101103111	2.5P	4.331	0.591	-	2.205	0.367	0.275	0.437	3	3
9/16-12UNC	GH5	5101103126	2.5P	4.331	0.709	-	2.205	0.429	0.322	0.5	3	3
5/8-11UNC	GH5	5101103138	2.5P	4.331	0.709	-	2.205	0.48	0.36	0.562	3	3

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