

Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓ	ℓ_n	ℓ_s	Ds	K	ℓ_k

DIN

Z-PRO HVSP

Z-PRO Hybrid Value Spiral Fluted Taps for Steels



Specification



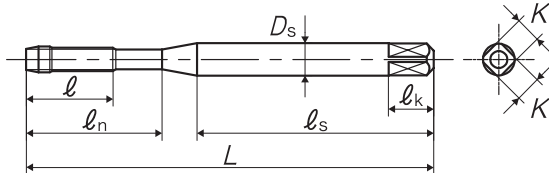
■The HVSP is a spiral flute tap for blind hole tapping where problems existed in chipping the cutting chamfer. It enables trouble free perfect threading.

Tapping Speeds depending on Materials

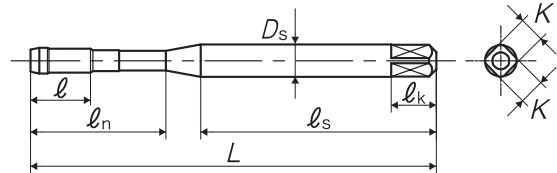
Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼	Thermal refined steels 調質鋼	Stainless steels ステンレス鋼	Cast steels 鋳鋼
3~12 (m/min)	3~12 (m/min)	3~12 (m/min)	3~12 (m/min)	~5 (m/min)	~5 (m/min)	3~12 (m/min)

25~35HRC

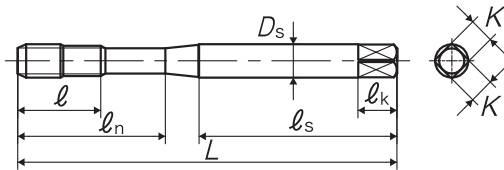
TYPE: 1



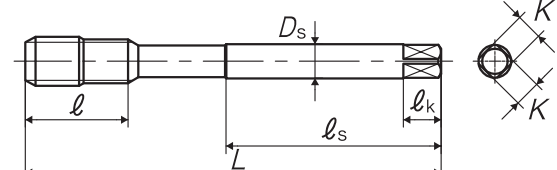
TYPE: 2



TYPE: 3



TYPE: 4



Segment : 1C

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	TYPE
For Metric Threads												
M3 × 0.5	ISO2X	SD3.0GYEEXJ	2.5P	56	9	18	34	3.5	2.7	6	3	1
M3 × 0.35	ISO2X	SD3.0DREEXJ	2.5P	56	6.5	18	34	3.5	2.7	6	3	2
M4 × 0.7	ISO2X	SD4.0IYEEXJ	2.5P	63	13	21	38	4.5	3.4	6	3	1
M4 × 0.5	ISO2X	SD4.0GSEEXJ	2.5P	63	9	21	38	4.5	3.4	6	3	2
M5 × 0.8	ISO2X	SD5.0KYEEXJ	2.5P	70	14	25	39	6	4.9	8	3	1
M5 × 0.5	ISO2X	SD5.0GSEEXJ	2.5P	70	9	25	39	6	4.9	8	3	2
M6 × 1	ISO2X	SD6.0MYEEXJ	2.5P	80	15	30	45	6	4.9	8	3	3
M6 × 0.75	ISO2X	SD6.0JSEEXJ	2.5P	80	15	30	45	6	4.9	8	3	3
M6 × 0.5	ISO2X	SD6.0GSEEXJ	2.5P	80	9	30	45	6	4.9	8	3	3
M8 × 1.25	ISO2X	SD8.0NYEEXJ	2.5P	90	19	35	47	8	6.2	9	3	3
M8 × 1	ISO2X	SM8.0MSEEXJ	2.5P	90	19	-	46	6	4.9	8	3	4
M10 × 1.5	ISO2X	SD10.0OYEEXJ	2.5P	100	23	39	52.5	10	8	11	3	3
M10 × 1.25	ISO2X	SM10.0NSEEXJ	2.5P	100	23	-	51	7	5.5	8	3	4
M10 × 1	ISO2X	SM10.0MSEEXJ	2.5P	90	19	-	46	7	5.5	8	3	4
M12 × 1.75	ISO2X	SG12.0PSEEXJ	2.5P	110	26	-	56	9	7	10	3	4
M12 × 1.5	ISO2X	SM12.0OSEEXJ	2.5P	100	21	-	51	9	7	10	3	4
M12 × 1.25	ISO2X	SM12.0NSEEXJ	2.5P	100	21	-	51	9	7	10	3	4

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	<i>ℓ</i>	<i>ℓ_n</i>	<i>ℓ_s</i>	D _s	K	<i>ℓ_k</i>

DIN

HVSP Z-PRO Hybrid Value Spiral Fluted Taps for Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
M14 × 2	ISO2X	SG014QSEEXJ	2.5P	110	26	-	56	11	9	12	3	4
M14 × 1.5	ISO2X	SM014OSEEXJ	2.5P	100	21	-	51	11	9	12	3	4
M16 × 2	ISO2X	SG016QSEEXJ	2.5P	110	26	-	56	12	9	12	3	4
M16 × 1.5	ISO2X	SM016OSEEXJ	2.5P	100	21	-	51	12	9	12	3	4
M18 × 2.5	ISO2X	SG018RTEEXJ	2.5P	125	33	-	64	14	11	14	4	4
M18 × 1.5	ISO2X	SM018OTEEXJ	2.5P	110	24	-	56	14	11	14	4	4
M20 × 2.5	ISO2X	SG020RTEEXJ	2.5P	140	33	-	71	16	12	15	4	4
M20 × 1.5	ISO2X	SM020OTEEXJ	2.5P	125	24	-	64	16	12	15	4	4
M22 × 2.5	ISO2X	SG022RTEEXJ	2.5P	140	33	-	71	18	14.5	17	4	4
M22 × 1.5	ISO2X	SM022OTEEXJ	2.5P	125	24	-	64	18	14.5	17	4	4
M24 × 3	ISO2X	SG024STEEXJ	2.5P	160	37	-	82	18	14.5	17	4	4
M24 × 1.5	ISO2X	SM024OTEEXJ	2.5P	140	27	-	71	18	14.5	17	4	4
M27 × 3	ISO2X	SG027STEEXJ	2.5P	160	37	-	82	20	16	19	4	4
M27 × 1.5	ISO2X	SM027OTEEXJ	2.5P	140	27	-	71	20	16	19	4	4
M30 × 3.5	ISO2X	SG030TBEEEXJ	2.5P	180	44	-	92	22	18	21	4	4
M30 × 3	ISO2X	SM030SUEEXJ	2.5P	180	44	-	92	22	18	21	4	4
M30 × 1.5	ISO2X	SM030OUEEXJ	2.5P	150	27	-	77	22	18	21	4	4
M33 × 3.5	ISO2X	SG033TBEEEXJ	2.5P	180	46	-	92	25	20	23	4	4
M33 × 3	ISO2X	SM033SUEEXJ	2.5P	180	46	-	92	25	20	23	4	4
M36 × 4	ISO2X	SG036UBEEXJ	2.5P	200	52	-	102	28	22	25	4	4
M36 × 3	ISO2X	SM036SUEEXJ	2.5P	200	52	-	102	28	22	25	4	4
M39 × 4	ISO2X	SG039UBEEXJ	2.5P	200	52	-	102	32	24	27	4	4
M39 × 3	ISO2X	SM039SUEEXJ	2.5P	200	52	-	102	32	24	27	4	4
M42 × 4.5	ISO2X	SG042VBEEEXJ	2.5P	200	59	-	102	32	24	27	4	4
M42 × 3	ISO2X	SM042SUEEXJ	2.5P	200	59	-	102	32	24	27	4	4
M48 × 5	ISO2X	SG048WBEEEXJ	2.5P	250	65	-	128	36	29	32	4	4
M48 × 3	ISO2X	SM048SUEEXJ	2.5P	225	49	-	115	36	29	32	4	4
For Unified Threads												
No.5-40UNC	2BX	SDUN5HYEEXJ	C (2.5P)	56	5	18	34	3.5	2.7	6	3	1
No.5-44UNF	2BX	SDUN5GYEEXJ	C (2.5P)	56	5	18	34	3.5	2.7	6	3	1
No.6-32UNC	2BX	SDUN6JYEEXJ	C (2.5P)	56	7	19	32	4	3	6	3	1
No.6-40UNF	2BX	SDUN6HYEEXJ	C (2.5P)	56	7	19	32	4	3	6	3	1
No.8-32UNC	2BX	SDUN8JYEEXJ	C (2.5P)	63	7	21	38	4.5	3.4	6	3	1
No.8-36UNF	2BX	SDUN8IYEEXJ	C (2.5P)	63	7	21	38	4.5	3.4	6	3	1
No.10-24UNC	2BX	SDUNAMYEEXJ	C (2.5P)	70	9	24	39	6	4.9	8	3	1
No.10-32UNF	2BX	SDUNAJYEEXJ	C (2.5P)	70	9	24	39	6	4.9	8	3	1
1/4-20UNC	2BX	SDU04NYEEXJ	C (2.5P)	80	11	30	42	7	5.5	8	3	1
1/4-28UNF	2BX	SDU04KYEEXJ	C (2.5P)	80	11	30	42	7	5.5	8	3	1
1 -8UNC	2BX	SGU16XYEEXJ	2.5P	160	37	-	82	18	14.5	17	4	4
1 -12UNF	2BX	SMU16SYEEXJ	2.5P	140	27	-	71	18	14.5	17	4	4
1 1/8-7UNC	2BX	SGU18YYEEXJ	2.5P	180	44	-	92	22	18	21	4	4
1 1/8-8UN	2BX	SMU18XYEEXJ	2.5P	180	44	-	92	22	18	21	4	4
1 1/8-12UNF	2BX	SMU18SYEEXJ	2.5P	150	27	-	77	22	18	21	4	4
1 1/4-7UNC	2BX	SGU20YYEEXJ	2.5P	180	49	-	92	22	18	21	4	4
1 1/4-8UN	2BX	SMU20XYEEXJ	2.5P	180	49	-	92	22	18	21	4	4
1 1/4-12UNF	2BX	SMU20SYEEXJ	2.5P	150	27	-	77	22	18	21	4	4
1 3/8-6UNC	2BX	SGU22ZYEEXJ	2.5P	200	55	-	102	28	22	25	4	4
1 3/8-8UN	2BX	SMU22XYEEXJ	2.5P	200	55	-	102	28	22	25	4	4
1 3/8-12UNF	2BX	SMU22SYEEXJ	2.5P	170	29	-	87	28	22	25	4	4
1 1/2-6UNC	2BX	SGU24ZYEEXJ	2.5P	200	59	-	102	32	24	27	4	4

DIN



• 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

HVSP Z-PRO Hybrid Value Spiral Fluted Taps for Steels

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE
1 1/2-8UN	2BX	SMU24XYEEXJ	2.5P	200	59	-	102	32	24	27	4	4
1 1/2-12UNF	2BX	SMU24SYEEXJ	2.5P	170	29	-	87	32	24	27	4	4
1 3/4-5UNC	2BX	SGU280YEEXJ	2.5P	220	65	-	112	36	29	32	4	4
1 3/4-8UN	2BX	SMU28XYEEXJ	2.5P	200	49	-	102	36	29	32	4	4
1 3/4-12UN	2BX	SMU28SYEEXJ	2.5P	180	31	-	92	36	29	32	4	4
2 -4 1/2UNC	2BX	SGU329YEEXJ	2.5P	250	73	-	128	40	32	35	4	4
2 -8UN	2BX	SMU32XYEEXJ	2.5P	225	49	-	115	40	32	35	4	4

1

DIN

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

DIN

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