

HVSP

Introducing Spiral
Fluted Taps for
dramatically
improved chip
ejection!

▪ Hybrid Value Spiral Fluted Taps for steels ▪

HVSP

Z-PRO

Lineup for Ultimate Machining Taps

JIS

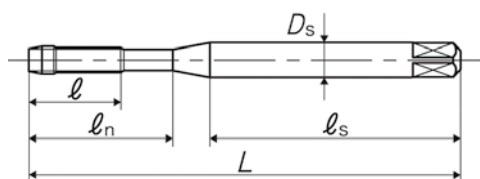
Expanded size range!

M3-M10 (fine and course)

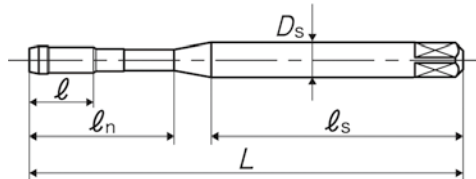


Dimensions and sizes

TYPE:1



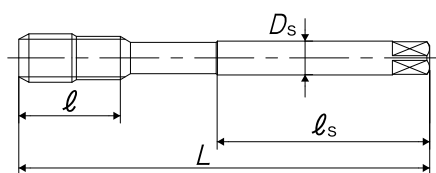
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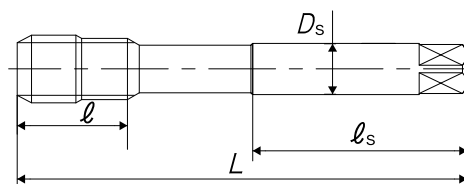
	Size	Class	Code	Chamfer	L (mm)	l (mm)	l _n (mm)	l _s (mm)	D _s (mm)	No. of flutes	TYPE	MSRP(JPY)
NEW	M3×0.5	P3	SY03.0GREEXJ	2.5P	56	9	18	32	4	3	1	1,400
NEW	M3×0.35	P3	SY03.0DREEXJ	2.5P	56	6.5	18	32	4	3	2	2,390
NEW	M4×0.7	P4	SY04.0ISEEXJ	2.5P	63	13	36	36.5	5	3	1	1,400
NEW	M4×0.5	P4	SY04.0GSEEXJ	2.5P	63	9	36	37	5	3	2	2,050
NEW	M5×0.8	P4	SY05.0KSEEXJ	2.5P	70	14	40	40.5	5.5	3	1	1,410
NEW	M5×0.5	P4	SY05.0GSEEXJ	2.5P	70	9	40	41	5.5	3	2	2,050
NEW	M6×1	P4	SY06.0MSEEXJ	2.5P	80	15	45	45.5	6	3	1	1,610
NEW	M6×0.75	P4	SY06.0JSEEXJ	2.5P	80	15	45	46	6	3	1	2,270
NEW	M6×0.5	P4	SY06.0GSEEXJ	2.5P	80	9	45	46	6	3	2	2,270
NEW	M8×1.25	P4	SY08.0NSEEXJ	2.5P	90	19	-	46	6.2	3	3	2,270
NEW	M8×1	P4	SY08.0MSEEXJ	2.5P	90	19	-	46	6.2	3	3	2,580
NEW	M10×1.5	P4	SY010.0SEEXJ	2.5P	100	23	-	51	7	3	3	2,970
NEW	M10×1.25	P4	SY010NSEEXJ	2.5P	100	23	-	51	7	3	3	2,970
NEW	M10×1	P4	SY010MSEEXJ	2.5P	100	23	-	51	7	3	3	3,520
	M12×1.75	P4	SY012PSEEXJ	2.5P	110	26	-	56	8.5	3	3	4,000
	M12×1.5	P4	SY012.0SEEXJ	2.5P	110	26	-	56	8.5	3	3	4,000
	M12×1.25	P4	SY012NSEEXJ	2.5P	110	26	-	56	8.5	3	3	4,000
	M14×2	P4	SY014QSEEXJ	2.5P	110	26	-	56	10.5	3	3	5,470
	M14×1.5	P4	SY014.0SEEXJ	2.5P	110	26	-	56	10.5	3	3	5,470
	M16×2	P4	SY016QSEEXJ	2.5P	110	26	-	56	12.5	3	3	7,300
	M16×1.5	P4	SY016.0SEEXJ	2.5P	110	26	-	56	12.5	3	3	7,300
	M18×2.5	P5	SY018RTEEXJ	2.5P	125	33	-	64	14	4	3	9,760
	M18×1.5	P5	SY018.0TEEXJ	2.5P	125	33	-	64	14	4	3	9,760
	M20×2.5	P5	SY020RTEEXJ	2.5P	140	33	-	71	15	4	4	13,300
	M20×1.5	P5	SY020.0TEEXJ	2.5P	140	33	-	71	15	4	4	13,300
	M22×2.5	P5	SY022RTEEXJ	2.5P	140	33	-	71	17	4	4	16,800
	M22×1.5	P5	SY022.0TEEXJ	2.5P	140	33	-	71	17	4	4	16,800
	M24×3	P5	SY024STEEXJ	2.5P	160	37	-	82	19	4	4	21,000
	M24×1.5	P5	SY024.0TEEXJ	2.5P	160	37	-	82	19	4	4	21,000
	M27×3	P5	SY027STEEXJ	2.5P	160	37	-	82	20	4	4	29,700
	M27×1.5	P5	SY027.0TEEXJ	2.5P	160	37	-	82	20	4	4	29,700
	M30×3.5	P6	SY030TUEEXJ	2.5P	180	44	-	92	23	4	4	37,700
	M30×3	P6	SY030SUEEXJ	2.5P	180	44	-	92	23	4	4	37,700
	M30×1.5	P6	SY030.0UEEXJ	2.5P	180	44	-	92	23	4	4	37,700
	M33×3.5	P6	SY033TUEEXJ	2.5P	180	46	-	92	25	4	4	44,000
	M33×3	P6	SY033SUEEXJ	2.5P	180	46	-	92	25	4	4	44,000
	M36×4	P6	SY036UUEEXJ	2.5P	200	52	-	102	28	4	4	50,700
	M36×3	P6	SY036SUEEXJ	2.5P	200	52	-	102	28	4	4	50,700
	M39×4	P6	SY039UUEEXJ	2.5P	200	52	-	102	30	4	4	58,200
	M39×3	P6	SY039SUEEXJ	2.5P	200	52	-	102	30	4	4	58,200
	M42×4.5	P6	SY042VUEEXJ	2.5P	200	59	-	102	32	4	4	70,800
	M42×3	P6	SY042SUEEXJ	2.5P	200	59	-	102	32	4	4	70,800
	M48×5	P6	SY048WUEEXJ	2.5P	250	65	-	128	38	4	4	103,000
	M48×3	P6	SY048SUEEXJ	2.5P	250	65	-	128	38	4	4	103,000

NEW : Expanded sizes

TYPE:3



TYPE:4



Size	Class	Code	Chamfer	L (mm)	l (mm)	l _n (mm)	l _s (mm)	D _s (mm)	No. of flutes	TYPE	MSRP(JPY)
1-8UNC	P5	SYU16XTEEXJ	2.5P	160	37	-	82	19	4	4	32,600
1-12UNF	P4	SYU16SSEEXJ	2.5P	160	37	-	82	19	4	4	32,600
1 1/8-7UNC	P6	SYU18YUEEXJ	2.5P	180	44	-	92	23	4	4	40,800 *
1 1/8-8UN	P5	SYU18XTEEXJ	2.5P	180	44	-	92	23	4	4	40,800 *
1 1/8-12UNF	P4	SYU18SSEEXJ	2.5P	180	44	-	92	23	4	4	40,800 *
1 1/4-7UNC	P6	SYU20YUEEXJ	2.5P	180	44	-	92	24	4	4	47,700 *
1 1/4-8UN	P5	SYU20XTEEXJ	2.5P	180	44	-	92	24	4	4	47,700 *
1 1/4-12UNF	P4	SYU20SSEEXJ	2.5P	180	44	-	92	24	4	4	47,700 *
1 3/8-6UNC	P6	SYU22ZUEEXJ	2.5P	200	52	-	102	28	4	4	60,000 *
1 3/8-8UN	P5	SYU22XTEEXJ	2.5P	200	52	-	102	28	4	4	60,000 *
1 3/8-12UNF	P4	SYU22SSEEXJ	2.5P	200	52	-	102	28	4	4	60,000 *
1 1/2-6UNC	P6	SYU24ZUEEXJ	2.5P	200	52	-	102	30	4	4	64,000 *
1 1/2-8UN	P5	SYU24XTEEXJ	2.5P	200	52	-	102	30	4	4	64,000 *
1 1/2-12UNF	P4	SYU24SSEEXJ	2.5P	200	52	-	102	30	4	4	64,000 *
1 3/4-5UNC	P6	SYU28OUEEXJ	2.5P	220	59	-	112	35	4	4	80,900 *
1 3/4-8UN	P5	SYU28XTEEXJ	2.5P	220	59	-	112	35	4	4	80,900 *
1 3/4-12UN	P4	SYU28SSEEXJ	2.5P	220	59	-	112	35	4	4	80,900 *
2-4 1/2UNC	P7	SYU329VEEXJ	2.5P	250	73	-	128	40	4	4	117,000 *
2-8UN	P6	SYU32XUEEXJ	2.5P	250	73	-	128	40	4	4	117,000 *

*Made-to-order products

Compatible with a wide range of materials

Guideline for HVSP tapping conditions

Workpiece materials		Recommended tapping speed (m/min)		
		M3~M5	M6~M16	M18~M48, U1~U2
Low Carbon Steels	~S20C/SS400	3~9	3~12	3~8
Medium Carbon Steels	S25C~S45C	3~9	3~12	3~8
High Carbon Steels	S45C~	3~9	3~12	3~8
Alloy Steels	SCM/SCr	3~9	3~12	3~8
Thermal Refined Steels	25~35HRC	3~9	3~12	3~8
Cast Steels	SC	3~9	3~12	3~8
Stainless Steels	SU303/SUS304	~5	~5	~5

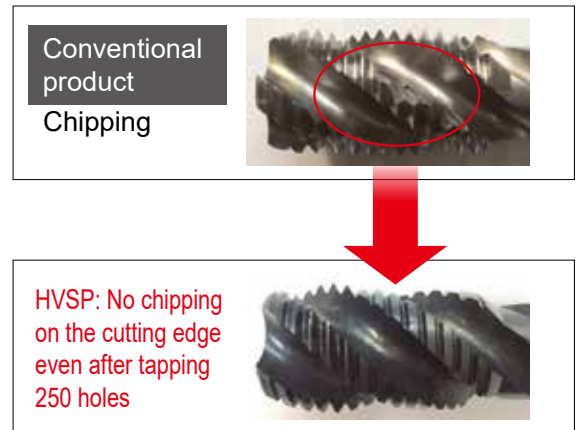
(For both synchronous and asynchronous feed)

Solution to chipping issues

Tapping conditions:HVSP M36x4

Workpiece material	SS400
Tapping speed	3m/min
Tapping length	50mm
Machine	Radial drilling machine
Lubrication	Water insoluble oil

• Full thread area



Tapping conditions:HVSP M10x1.5

Workpiece material	S45C
Tapping speed	12m/min
Tapping length	17mm
Machine	Horizontal machine
Lubrication	Water soluble fluid

Excellent chip ejection



No chipping even after tapping 1,184 holes



The uniquely designed cutting edge+BLF(special relief on the full thread area) dramatically reduce chipping issues.

- Specially designed cutting edge and relief on the full thread area.
- Heel cut performance has been improved in order to accurately cut the chips deep inside the internal thread and eliminate the remaining chips.
- Due to improved chip ejection, chipping of the chamfer area is less likely to occur during the reversal of the tap.
- The threads on HVSP are specially designed with three full threads and subsequent threads ground down to the pitch diameter to prevent chipping.

Warning

- ◆Tools may shatter. Wear cover or eye glasses to avoid injury during tapping.
- ◆Tools may shatter. Use tools under the proper tapping condition.
- ◆Never wear gloves during turning operations as the gloves may get caught with the tools.
- ◆Wear safety shoes to avoid injuring yourself by the falling tools.
- ◆On attaching tools to the machine, fasten firmly to avoid chattering and run-out.
- ◆Fasten the work pieces firmly so that they never move during operation. Never use worn tools or damaged tools with chipping.
- ◆Take a special care to fire trouble. High temperature during machining may cause fire.

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JQA-EM3465