SOLID ROUND TOOLS

ONE-STOP MACHINING SOLUTION

Solid Round Tools
One-Stop Machining Solution



YPP Tap® Series

High-Performance Universal Coated Tap

One-Stop Service

Customized Solution

Sandvik Coromant Technical Support

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Version No. YP-Tap-202601

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YONGPUPRECISION

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ABOUT US

SOLID ROUND TOOLS
ONE-STOP MACHINING SOLUTION

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Suzhou Yongpu Precision Technology Co., Ltd. (“Yongpu Precision”) was founded in 2013. Headquartered in Wujiang Economic Development Zone, Suzhou, we operate two major manufacturing bases in Suzhou and Chuzhou, alongside three production and reconditioning centers in Wuhan, Chengdu and Zhuzhou.

Yongpu Precision specializes in the R&D, production and service of solid round tools. Backed by technical support from the Sandvik Group, we deliver full industrial chain customization covering rod stock, cutting tools and coatings.

We always adhere to our mission: “Solve customers’ machining challenges through technological innovation and help customers improve efficiency and reduce costs with high-quality products.”

We embed our core values — Integrity, Collaboration, Professionalism, and Enterprise — across all business operations. Yongpu Precision strives to deliver efficient, reliable one-stop solid round tool solutions for global industries, continuously empowering the metalworking sector with professional expertise.



YPP Tap® ST300
Coated Spiral-Flute Tap

M DIN 13 | M JIS | 6H | 6HX | ≤ 2.5xD1 | C=2-3 | ∠40° | ∠45° | 32HRC 1200 ~700 N/mm²

P M K



Precision-Honed Cutting Edge
Ensuring Optimal Chip Formation

All-New Cutting Geometry
Suitable for a Wide Range of Materials

The AlCrN Nano-Composite Coating Delivers Excellent Wear Resistance
While its reduced friction lowers cutting temperatures

Optimized Flank (Tooth-Back) Geometry
Ensures reliable performance across different materials and processes, enabling clean, smooth shearing at the chip root

Optimal Chip Evacuation
Thanks to the Special Flute Geometry

- Ideal for customers machining a wide variety of materials
- High-performance HSS-E substrate for long, stable tool life
- Optimized flute geometry suits a broad range of materials — carbon and alloy steels, stainless steel, and ductile (nodular) iron
- Optimized helical flutes ensure effective chip evacuation in blind-hole tapping
- Suitable for both synchronized and non-synchronized tapping machines
- Appropriate PVD coating ensures reliable performance

YPP Tap® ST300
High-Performance Universal Coated Tap

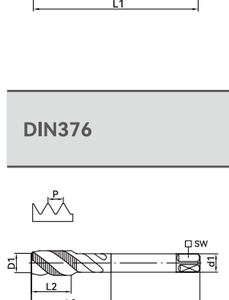


YPP Tap® DIN Series
High Productivity Spiral Flute Tap

M DIN 13 | 6H | 6HX

≤ 2.5xD1 | C=2-3 | ∠40° | 32HRC 1200 ~700 N/mm²

	P	M	K	N	S	H	O
AlCrN	●●	●	●●				

DIN371	EDP NO.AlCrN	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S335D213-M3x0.5	M3	0.5	3.5	2.7	56	10.0	18	3	6H
	S335D213-M4x0.7	M4	0.7	4.5	3.4	63	8.4	21	3	6H
	S335D213-M5x0.8	M5	0.8	6.0	4.9	70	9.6	25	3	6H
	S335D213-M6x1.0	M6	1.0	6.0	4.9	80	12.0	30	3	6H
	S335D213-M8x1.0	M8	1.0	8.0	6.2	90	15.0	35	3	6HX
	S335D213-M8x1.25	M8	1.25	8.0	6.2	90	15.0	35	3	6H
	S335D213-M10x1.0	M10	1.0	10.0	8.0	100	18.0	39	3	6HX
	S335D213-M10x1.25	M10	1.25	10.0	8.0	100	18.0	39	3	6HX
	S335D213-M10x1.5	M10	1.5	10.0	8.0	100	18.0	39	3	6H

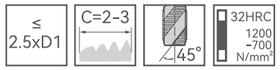
DIN376	EDP NO.AlCrN	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S335D213-M12x1.25	M12	1.25	9.0	7.0	110	18.0	--	3	6H
	S335D213-M12x1.5	M12	1.5	9.0	7.0	110	18.0	--	3	6H
	S335D213-M12x1.75	M12	1.75	9.0	7.0	110	18.0	--	3	6H
	S335D213-M14x1.5	M14	1.5	11.0	9.0	110	20.0	--	3	6HX
	S335D213-M14x2.0	M14	2.0	11.0	9.0	110	20.0	--	3	6HX
	S335D213-M16x1.5	M16	1.5	12.0	9.0	110	20.0	--	3	6HX
	S335D213-M16x2.0	M16	2.0	12.0	9.0	110	20.0	--	3	6HX
	S335D213-M18x1.5	M18	1.5	14.0	11.0	125	25.0	--	4	6HX
	S335D213-M18x2.5	M18	2.5	14.0	11.0	125	25.0	--	4	6HX
	S335D213-M20x1.5	M20	1.5	16.0	12.0	140	25.0	--	4	6HX
	S335D213-M20x2.5	M20	2.5	16.0	12.0	140	25.0	--	4	6HX
	S335D213-M24x3.0	M24	3.0	18.0	14.5	160	30.0	--	4	6HX

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YPP Tap® ST300
High-Performance Universal Coated Tap

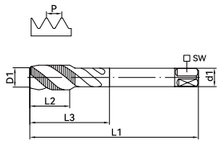


YPP Tap® JIS Series
High Productivity Spiral Flute Tap



M JIS | 6H | 6HX

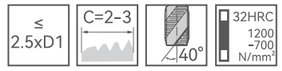
	P	M	K	N	S	H	O
ZrN	●●	●●	●●				
CrN+X	●●	●●	●				
AlCrN	●●	●	●●				

JIS	EDP NO.ZrN	EDP NO.CrN+X	EDP NO.AlCrN	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S359J215-M3x0.5	S355J215-M3x0.5	S357J215-M3x0.5	M3	0.5	4.0	3.2	46	10.0	19	3	6H
	S359J215-M4x0.7	S355J215-M4x0.7	S357J215-M4x0.7	M4	0.7	5.0	4.0	52	8.4	20	3	6H
	S359J215-M5x0.8	S355J215-M5x0.8	S357J215-M5x0.8	M5	0.8	5.5	4.5	60	9.6	24	3	6H
	S359J215-M6x1.0	S355J215-M6x1.0	S357J215-M6x1.0	M6	1.0	6.0	4.5	62	12.0	29	3	6H
	S359J215-M8x1.0	S355J215-M8x1.0	S357J215-M8x1.0	M8	1.0	6.2	5.0	70	15.0	37	3	6HX
	S359J215-M8x1.25	S355J215-M8x1.25	S357J215-M8x1.25	M8	1.25	6.2	5.0	70	15.0	37	3	6H
	S359J215-M10x1.0	S355J215-M10x1.0	S357J215-M10x1.0	M10	1.0	7.0	5.5	75	18.0	41	3	6HX
	S359J215-M10x1.25	S355J215-M10x1.25	S357J215-M10x1.25	M10	1.25	7.0	5.5	75	18.0	41	3	6HX
	S359J215-M10x1.5	S355J215-M10x1.5	S357J215-M10x1.5	M10	1.5	7.0	5.5	75	18.0	41	3	6H
	S359J215-M12x1.25	S355J215-M12x1.25	S357J215-M12x1.25	M12	1.25	8.5	6.5	82	18.0	48	3	6HX
	S359J215-M12x1.5	S355J215-M12x1.5	S357J215-M12x1.5	M12	1.5	8.5	6.5	82	18.0	48	3	6HX
	S359J215-M12x1.75	S355J215-M12x1.75	S357J215-M12x1.75	M12	1.75	8.5	6.5	82	18.0	48	3	6H
	S359J215-M14x1.5		S357J215-M14x1.5	M14	1.5	10.5	8.0	88	20.0	48	3	6HX
	S359J215-M14x2.0		S357J215-M14x2.0	M14	2.0	10.5	8.0	88	20.0	48	3	6HX
	S359J215-M16x1.5		S357J215-M16x1.5	M16	1.5	12.5	10.0	95	20.0	52	4	6HX
	S359J215-M16x2.0		S357J215-M16x2.0	M16	2.0	12.5	10.0	95	20.0	52	4	6HX
	S359J215-M18x1.5		S357J215-M18x1.5	M18	1.5	14.0	11.0	100	25.0	55	4	6HX
	S359J215-M18x2.5		S357J215-M18x2.5	M18	2.5	14.0	11.0	100	25.0	55	4	6HX
	S359J215-M20x1.5		S357J215-M20x1.5	M20	1.5	15.0	12.0	105	25.0	58	4	6HX
	S359J215-M20x2.5		S357J215-M20x2.5	M20	2.5	15.0	12.0	105	25.0	58	4	6HX
	S359J215-M24x3.0		S357J215-M24x3.0	M24	3.0	19.0	15.0	120	30.0	66	4	6HX

YPP Tap® ST300
High-Performance Universal Coated Tap

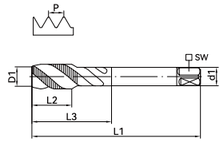


YPP Tap® JIS Series
High Productivity Spiral Flute Tap

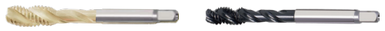


M JIS | 6H | 6HX

	P	M	K	N	S	H	O
ZrN	●●	●●	●●				
CrN+X	●●	●●	●				
AlCrN	●●	●	●●				

JIS	EDP NO.ZrN	EDP NO.CrN+X	EDP NO.AlCrN	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S339J213-M3x0.5	S335J213-M3x0.5	S337J213-M3x0.5	M3	0.5	4.0	3.2	46	10.0	19	3	6H
	S339J213-M4x0.7	S335J213-M4x0.7	S337J213-M4x0.7	M4	0.7	5.0	4.0	52	8.4	20	3	6H
	S339J213-M5x0.8	S335J213-M5x0.8	S337J213-M5x0.8	M5	0.8	5.5	4.5	60	9.6	24	3	6H
	S339J213-M6x1.0	S335J213-M6x1.0	S337J213-M6x1.0	M6	1.0	6.0	4.5	62	12.0	29	3	6H
	S339J213-M8x1.0	S335J213-M8x1.0	S337J213-M8x1.0	M8	1.0	6.2	5.0	70	15.0	37	3	6HX
	S339J213-M8x1.25	S335J213-M8x1.25	S337J213-M8x1.25	M8	1.25	6.2	5.0	70	15.0	37	3	6H
	S339J213-M10x1.0	S335J213-M10x1.0	S337J213-M10x1.0	M10	1.0	7.0	5.5	75	18.0	41	3	6HX
	S339J213-M10x1.25	S335J213-M10x1.25	S337J213-M10x1.25	M10	1.25	7.0	5.5	75	18.0	41	3	6HX
	S339J213-M10x1.5	S335J213-M10x1.5	S337J213-M10x1.5	M10	1.5	7.0	5.5	75	18.0	41	3	6H
	S339J213-M12x1.25	S335J213-M12x1.25	S337J213-M12x1.25	M12	1.25	8.5	6.5	82	18.0	48	3	6HX
	S339J213-M12x1.5	S335J213-M12x1.5	S337J213-M12x1.5	M12	1.5	8.5	6.5	82	18.0	48	3	6HX
	S339J213-M12x1.75	S335J213-M12x1.75	S337J213-M12x1.75	M12	1.75	8.5	6.5	82	18.0	48	3	6H
	S339J213-M14x1.5		S335J213-M14x1.5	M14	1.5	10.5	8.0	88	20.0	48	3	6HX
	S339J213-M14x2.0		S335J213-M14x2.0	M14	2.0	10.5	8.0	88	20.0	48	3	6HX
	S339J213-M16x1.5		S335J213-M16x1.5	M16	1.5	12.5	10.0	95	20.0	52	3	6HX
	S339J213-M16x2.0		S335J213-M16x2.0	M16	2.0	12.5	10.0	95	20.0	52	3	6HX
	S339J213-M18x1.5		S335J213-M18x1.5	M18	1.5	14.0	11.0	100	25.0	55	4	6HX
	S339J213-M18x2.5		S335J213-M18x2.5	M18	2.5	14.0	11.0	100	25.0	55	4	6HX
	S339J213-M20x1.5		S335J213-M20x1.5	M20	1.5	15.0	12.0	105	25.0	58	4	6HX
	S339J213-M20x2.5		S335J213-M20x2.5	M20	2.5	15.0	12.0	105	25.0	58	4	6HX
	S339J213-M24x3.0		S335J213-M24x3.0	M24	3.0	19.0	15.0	120	30.0	66	4	6HX

YPP Tap® ST300
High-Performance Universal Coated Tap

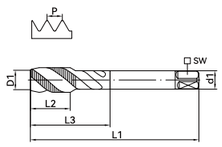


YPP Tap® JIS Series
Universal Long-shank Spiral Flute Tap

M JIS | 6H | 6HX | 

≤ 2.5xD1 | C=2-3 | 40° | 32HRC 1200 ~700 N/mm²

	P	M	K	N	S	H	O
ZrN	●●	●●	●●				
CrN+X	●●	●●	●				

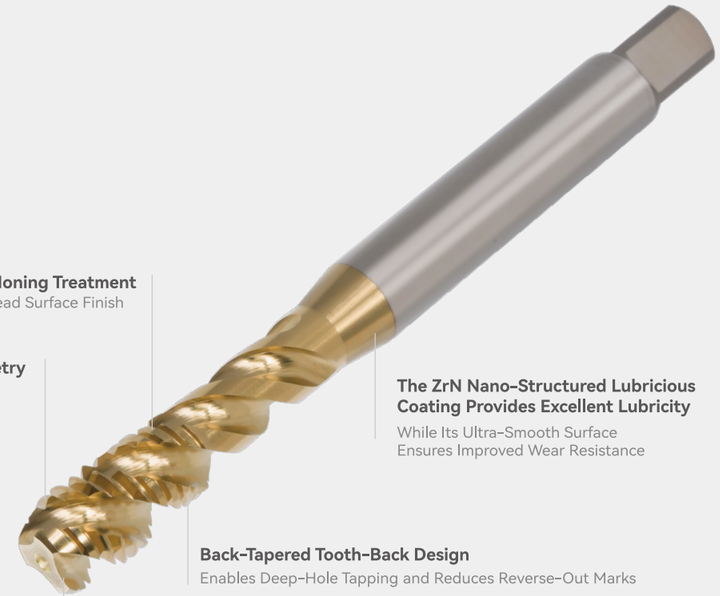
JIS-L100	EDP NO.ZrN	EDP NO.CrN+X	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S339JL213-M3x0.5	S335JL213-M3x0.5	M3	0.5	4.0	3.2	100	10.0	19	3	6H
	S339JL213-M4x0.7	S335JL213-M4x0.7	M4	0.7	5.0	4.0	100	8.4	21	3	6H
	S339JL213-M5x0.8	S335JL213-M5x0.8	M5	0.8	5.5	4.5	100	9.6	25	3	6H
	S339JL213-M6x1.0	S335JL213-M6x1.0	M6	1.0	6.0	4.5	100	12.0	29	3	6H
	S339JL213-M8x1.0	S335JL213-M8x1.0	M8	1.0	6.2	5.0	100	15.0	40	3	6HX
	S339JL213-M8x1.25	S335JL213-M8x1.25	M8	1.25	6.2	5.0	100	15.0	40	3	6H
	S339JL213-M10x1.0	S335JL213-M10x1.0	M10	1.0	7.0	5.5	100	18.0	41	3	6HX
	S339JL213-M10x1.25	S335JL213-M10x1.25	M10	1.25	7.0	5.5	100	18.0	41	3	6HX
	S339JL213-M10x1.5	S335JL213-M10x1.5	M10	1.5	7.0	5.5	100	18.0	41	3	6H
	S339JL213-M12x1.25	S335JL213-M12x1.25	M12	1.25	8.5	6.5	100	18.0	48	3	6HX
	S339JL213-M12x1.5	S335JL213-M12x1.5	M12	1.5	8.5	6.5	100	18.0	48	3	6HX
	S339JL213-M12x1.75	S335JL213-M12x1.75	M12	1.75	8.5	6.5	100	18.0	48	3	6H

■ YONGPUPRECISION

YPP Tap® ST300
Coated Spiral-Flute Tap

M DIN 13 | M JIS | 6H | 6HX | ≤ 3.5xD1 | C=2-3 | 50° | 28HRC 1000 ~700 N/mm²

P M K



Special Edge-Honing Treatment
Ensuring the Thread Surface Finish

Optimized Helix Geometry
Reduced Cutting Forces
During Tapping

The ZrN Nano-Structured Lubricious Coating Provides Excellent Lubricity
While Its Ultra-Smooth Surface
Ensures Improved Wear Resistance

Back-Tapered Tooth-Back Design
Enables Deep-Hole Tapping and Reduces Reverse-Out Marks

All-New Cutting Flute with a Large 50° Helix
Reduced Cutting Torque & Small, Well-Formed Chips

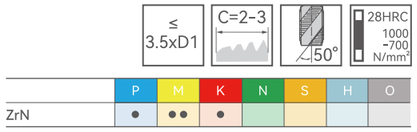
- Ideal for deep-hole tapping across a range of materials: 304/316 stainless steel and mild steel below HRC 25
- High-helix cutting flute geometry reduces cutting load and improves chip formation and evacuation
- Precision edge honing and special surface treatment ensure optimal chip formation and strong coating adhesion
- ZrN nano-structured low-friction coating reduces chip-flow resistance and delivers excellent anti-BUE / anti-galling performance
- Highly versatile — also suited to deep-hole tapping of 304/316 stainless, mild steel (HRC < 25), and aluminum alloys
- Works on tapping machines, lathes, multi-spindle machines, and machining centers
- Suitable for medium- to high-speed tapping, with high efficiency and stability

YPP Tap® ST300
High-Performance Universal Coated Tap

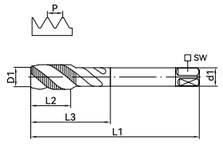


YPP Tap® DIN Series
High Productivity Spiral Flute Tap

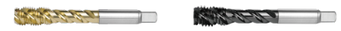




DIN371	EDP NO.ZrN	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S369D217-M3x0.5	M3	0.5	3.5	2.7	56	10.0	18	3	6HX
	S369D217-M4x0.7	M4	0.7	4.5	3.4	63	8.4	21	3	6HX
	S369D217-M5x0.8	M5	0.8	6.0	4.9	70	9.6	25	3	6HX
	S369D217-M6x1.0	M6	1.0	6.0	4.9	80	12.0	30	3	6HX
	S369D217-M8x1.0	M8	1.0	8.0	6.2	90	15.0	35	3	6HX
	S369D217-M8x1.25	M8	1.25	8.0	6.2	90	15.0	35	3	6HX
	S369D217-M10x1.0	M10	1.0	10.0	8.0	100	18.0	39	3	6HX
	S369D217-M10x1.25	M10	1.25	10.0	8.0	100	18.0	39	3	6HX
	S369D217-M10x1.5	M10	1.5	10.0	8.0	100	18.0	39	3	6HX

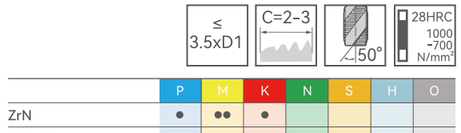
DIN376	EDP NO.ZrN	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S369D217-M12x1.25	M12	1.25	9.0	7.0	110	18.0	---	3	6HX
	S369D217-M12x1.5	M12	1.5	9.0	7.0	110	18.0	---	3	6HX
	S369D217-M12x1.75	M12	1.75	9.0	7.0	110	18.0	---	3	6HX
	S369D217-M14x1.5	M14	1.5	11.0	9.0	110	20.0	---	3	6HX
	S369D217-M14x2.0	M14	2.0	11.0	9.0	110	20.0	---	3	6HX
	S369D217-M16x1.5	M16	1.5	12.0	9.0	110	20.0	---	3	6HX
	S369D217-M16x2.0	M16	2.0	12.0	9.0	110	20.0	---	3	6HX
	S369D217-M18x1.5	M18	1.5	14.0	11.0	125	25.0	---	4	6HX
	S369D217-M18x2.5	M18	2.5	14.0	11.0	125	25.0	---	4	6HX
	S369D217-M20x1.5	M20	1.5	16.0	12.0	140	25.0	---	4	6HX
	S369D217-M20x2.5	M20	2.5	16.0	12.0	140	25.0	---	4	6HX
	S369D217-M24x3.0	M24	3.0	18.0	14.5	160	30.0	---	4	6HX

YPP Tap® ST300
High-Performance Universal Coated Tap



YPP Tap® JIS Series
High Productivity Spiral Flute Tap



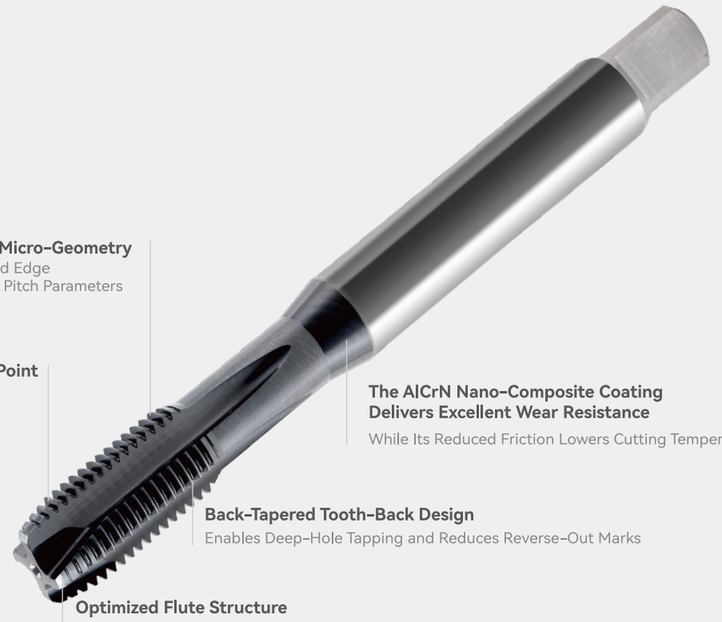


JIS	EDP NO.ZrN	EDP NO.CrN+X	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP tolerance
	S369J217-M3x0.5	S365J217-M3x0.5	M3	0.5	4.0	3.2	46	10.0	19	3	6HX
	S369J217-M4x0.7	S365J217-M4x0.7	M4	0.7	5.0	4.0	52	8.4	20	3	6HX
	S369J217-M5x0.8	S365J217-M5x0.8	M5	0.8	5.5	4.5	60	9.6	24	3	6HX
	S369J217-M6x1.0	S365J217-M6x1.0	M6	1.0	6.0	4.5	62	12.0	29	3	6HX
	S369J217-M8x1.0	S365J217-M8x1.0	M8	1.0	6.2	5.0	70	15.0	37	3	6HX
	S369J217-M8x1.25	S365J217-M8x1.25	M8	1.25	6.2	5.0	70	15.0	37	3	6HX
	S369J217-M10x1.0	S365J217-M10x1.0	M10	1.0	7.0	5.5	75	18.0	41	3	6HX
	S369J217-M10x1.25	S365J217-M10x1.25	M10	1.25	7.0	5.5	75	18.0	41	3	6HX
	S369J217-M10x1.5	S365J217-M10x1.5	M10	1.5	7.0	5.5	75	18.0	41	3	6HX
	S369J217-M12x1.25	S365J217-M12x1.25	M12	1.25	8.5	6.5	82	18.0	48	3	6HX
	S369J217-M12x1.5	S365J217-M12x1.5	M12	1.5	8.5	6.5	82	18.0	48	3	6HX
	S369J217-M12x1.75	S365J217-M12x1.75	M12	1.75	8.5	6.5	82	18.0	48	3	6HX
	S369J217-M14x1.5		M14	1.5	10.5	8.0	88	20.0	48	3	6HX
	S369J217-M14x2.0		M14	2.0	10.5	8.0	88	20.0	48	3	6HX
	S369J217-M16x1.5		M16	1.5	12.5	10.0	95	20.0	52	4	6HX
	S369J217-M16x2.0		M16	2.0	12.5	10.0	95	20.0	52	4	6HX
	S369J217-M18x1.5		M18	1.5	14.0	11.0	100	25.0	55	4	6HX
	S369J217-M18x2.5		M18	2.5	14.0	11.0	100	25.0	55	4	6HX
	S369J217-M20x1.5		M20	1.5	15.0	12.0	105	25.0	58	4	6HX
	S369J217-M20x2.5		M20	2.5	15.0	12.0	105	25.0	58	4	6HX
	S369J217-M24x3.0		M24	3.0	19.0	15.0	120	30.0	66	4	6HX

YPP Tap® ST200
Coated Spiral-point Tap

M DIN 13 | M JIS | 6H | 6HX | ≤ 3.5xD1 | B=4-5 | 32HRC 1200 ~700 N/mm²

P M K



Special Edge Micro-Geometry
Precision-Honed Edge
with Controlled Pitch Parameters

Optimized Helical Core Point
Reduced Cutting Forces
During the Tapping Feed

The AlCrN Nano-Composite Coating Delivers Excellent Wear Resistance
While Its Reduced Friction Lowers Cutting Temperatures

Back-Tapered Tooth-Back Design
Enables Deep-Hole Tapping and Reduces Reverse-Out Marks

Optimized Flute Structure
Controlled Chip Formation and Evacuation

- Ideal for customers machining a wide variety of materials
- High-performance HSS-E substrate delivers long, stable tool life
- Optimized flute geometry suits a broad range of materials — carbon and alloy steels, stainless steel, ductile (nodular) iron, and cast aluminum
- Optimized spiral-point (gun-tip) geometry on straight flutes ensures effective chip evacuation in through-hole tapping
- Suitable for both synchronized and non-synchronized tapping machines
- Appropriate PVD coating ensures reliable performance

YPP Tap® ST200
High-Performance Universal Coated Tap

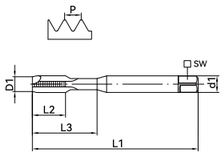


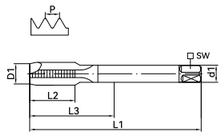
YPP Tap® DIN Series
High Productivity Spiral Point Tap

M DIN 13 | 6H | 6HX

≤ 3.5xD1 | B=4-5 | 32HRC 1200 ~700 N/mm²

	P	M	K	N	S	H	O
AlCrN	●●	●	●●				

DIN371	EDP NO.AlCrN	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S330HD215-M3x0.5	M3	0.5	3.5	2.7	56	10.0	18	3	6HX
	S330HD215-M4x0.7	M4	0.7	4.5	3.4	63	13.0	21	3	6HX
	S330HD215-M5x0.8	M5	0.8	6.0	4.9	70	16.0	25	3	6HX
	S330HD215-M6x1.0	M6	1.0	6.0	4.9	80	18.0	30	3	6HX
	S330HD215-M8x1.0	M8	1.0	8.0	6.2	90	20.0	35	4	6HX
	S330HD215-M8x1.25	M8	1.25	8.0	6.2	90	20.0	35	4	6HX
	S330HD215-M10x1.0	M10	1.0	10.0	8.0	100	20.0	39	4	6HX
	S330HD215-M10x1.25	M10	1.25	10.0	8.0	100	20.0	39	4	6HX
	S330HD215-M10x1.5	M10	1.5	10.0	8.0	100	20.0	39	4	6HX

DIN376	EDP NO.AlCrN	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S330HD215-M12x1.25	M12	1.25	9.0	7.0	110	25.0	--	5	6HX
	S330HD215-M12x1.5	M12	1.5	9.0	7.0	110	25.0	--	5	6HX
	S330HD215-M12x1.75	M12	1.75	9.0	7.0	110	25.0	--	5	6HX
	S330HD215-M14x1.5	M14	1.5	11.0	9.0	110	25.0	--	5	6HX
	S330HD215-M14x2.0	M14	2.0	11.0	9.0	110	25.0	--	4	6HX
	S330HD215-M16x1.5	M16	1.5	12.0	9.0	110	25.0	--	4	6HX
	S330HD215-M16x2.0	M16	2.0	12.0	9.0	110	25.0	--	4	6HX
	S330HD215-M18x1.5	M18	1.5	14.0	11.0	125	25.0	--	4	6HX
	S330HD215-M18x2.5	M18	2.5	14.0	11.0	125	25.0	--	4	6HX
	S330HD215-M20x1.5	M20	1.5	16.0	12.0	140	28.0	--	4	6HX
	S330HD215-M20x2.5	M20	2.5	16.0	12.0	140	28.0	--	4	6HX
	S330HD215-M24x3.0	M24	3.0	18 .0	14.5	160	32.0	--	4	6HX

■ YONGPUPRECISION

YPP Tap® ST200
High-Performance Universal Coated Tap

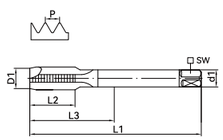


YPP Tap® JIS Series
High Productivity Spiral Point Tap

M JIS | 6H | 6HX

≤ 3.5xD1 | B=4-5 | 32HRC 1200 -700 N/mm²

	P	M	K	N	S	H	O
AlCrN	●●	●	●●				

JIS	EDP NO.AlCrN	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S330HJ215-M6x1.0	M6	1.0	6.0	4.5	62	16.0	29	3	6H
	S330HJ215-M8x1.0	M8	1.0	6.2	5.0	70	21.0	37	4	6HX
	S330HJ215-M8x1.25	M8	1.25	6.2	5.0	70	21.0	37	4	6H
	S330HJ215-M10x1.0	M10	1.0	7.0	5.5	75	23.0	41	4	6HX
	S330HJ215-M10x1.25	M10	1.25	7.0	5.5	75	23.0	41	4	6HX
	S330HJ215-M10x1.5	M10	1.5	7.0	5.5	75	23.0	41	4	6H
	S330HJ215-M12x1.25	M12	1.25	8.5	6.5	82	24.0	48	5	6H
	S330HJ215-M12x1.5	M12	1.5	8.5	6.5	82	24.0	48	5	6H
	S330HJ215-M12x1.75	M12	1.75	8.5	6.5	82	24.0	48	5	6H
	S330HJ215-M14x1.5	M14	1.5	10.5	8.0	88	24.0	48	5	6HX
	S330HJ215-M14x2.0	M14	2.0	10.5	8.0	88	24.0	48	4	6HX
	S330HJ215-M16x1.5	M16	1.5	12.5	10.0	95	24.0	52	4	6HX
	S330HJ215-M16x2.0	M16	2.0	12.5	10.0	95	24.0	52	4	6HX
	S330HJ215-M18x1.5	M18	1.5	14.0	11.0	100	24.0	55	4	6HX
	S330HJ215-M18x2.5	M18	2.5	14.0	11.0	100	24.0	55	4	6HX
	S330HJ215-M20x1.5	M20	1.5	15.0	12.0	105	26.0	58	4	6HX
	S330HJ215-M20x2.5	M20	2.5	15.0	12.0	105	26.0	58	4	6HX
	S330HJ215-M24x3.0	M24	3.0	19.0	15.0	120	32.0	66	4	6HX

YPP Tap® ST200
High-Performance Universal Coated Tap

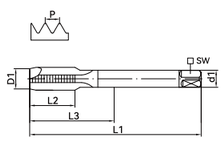


YPP Tap® JIS Series
High Productivity Spiral Point Tap

M JIS | 6H | 6HX

≤ 3.5xD1 | B=4-5 | 32HRC 1200 -700 N/mm²

	P	M	K	N	S	H	O
ZrN	●●	●●	●●				
CrN+X	●●	●●	●				
AlCrN	●●	●	●●				

JIS	EDP NO.ZrN	EDP NO.CrN+X	EDP NO.AlCrN	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S336J213-M3x0.5	S330J213-M3x0.5	S332J213-M3x0.5	M3	0.5	4.0	3.2	46	11.5	19	3	6H
	S336J213-M4x0.7	S330J213-M4x0.7	S332J213-M4x0.7	M4	0.7	5.0	4.0	52	13.0	20	3	6H
	S336J213-M5x0.8	S330J213-M5x0.8	S332J213-M5x0.8	M5	0.8	5.5	4.5	60	16.0	24	3	6H
	S336J213-M6x1.0	S330J213-M6x1.0	S332J213-M6x1.0	M6	1.0	6.0	4.5	62	19.0	29	3	6H
	S336J213-M8x1.0	S330J213-M8x1.0	S332J213-M8x1.0	M8	1.0	6.2	5.0	70	21.0	37	3	6HX
	S336J213-M8x1.25	S330J213-M8x1.25	S332J213-M8x1.25	M8	1.25	6.2	5.0	70	21.0	37	3	6H
	S336J213-M10x1.0	S330J213-M10x1.0	S332J213-M10x1.0	M10	1.0	7.0	5.5	75	23.0	41	3	6HX
	S336J213-M10x1.25	S330J213-M10x1.25	S332J213-M10x1.25	M10	1.25	7.0	5.5	75	23.0	41	3	6HX
	S336J213-M10x1.5	S330J213-M10x1.5	S332J213-M10x1.5	M10	1.5	7.0	5.5	75	23.0	41	3	6H
	S336J213-M12x1.25	S330J213-M12x1.25	S332J213-M12x1.25	M12	1.25	8.5	6.5	82	24.0	48	3	6HX
	S336J213-M12x1.5	S330J213-M12x1.5	S332J213-M12x1.5	M12	1.5	8.5	6.5	82	24.0	48	3	6HX
	S336J213-M12x1.75	S330J213-M12x1.75	S332J213-M12x1.75	M12	1.75	8.5	6.5	82	24.0	48	3	6H
	S336J215-M14x1.5		S332J213-M14x1.5	M14	1.5	10.5	8.0	88	24.0	48	3	6HX
	S336J215-M14x2.0			M14	2.0	10.5	8.0	88	24.0	48	4	6HX
	S336J215-M16x1.5			M16	1.5	12.5	10.0	95	24.0	52	4	6HX
	S336J215-M16x2.0			M16	2.0	12.5	10.0	95	24.0	52	4	6HX
	S336J215-M18x1.5			M18	1.5	14.0	11.0	100	24.0	55	4	6HX
	S336J215-M18x2.5			M18	2.5	14.0	11.0	100	24.0	55	4	6HX
	S336J215-M20x1.5			M20	1.5	15.0	12.0	105	26.0	58	4	6HX
	S336J215-M20x2.5			M20	2.5	15.0	12.0	105	26.0	58	4	6HX
	S336J215-M24x3.0			M24	3.0	19.0	15.0	120	32.0	66	4	6HX

YPP Tap® ST200
High-Performance Universal Coated Tap

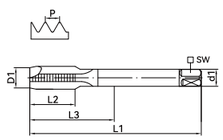


YPP Tap® JIS Series
Universal Long-shank Spiral Point Tap

≤ 3.5xD1 | B=4~5 | 32HRC 1200 ~700 N/mm²

M JIS | 6H | 6HX

	P	M	K	N	S	H	O
ZrN	●●	●●	●●				
CrN+X	●●	●●	●				

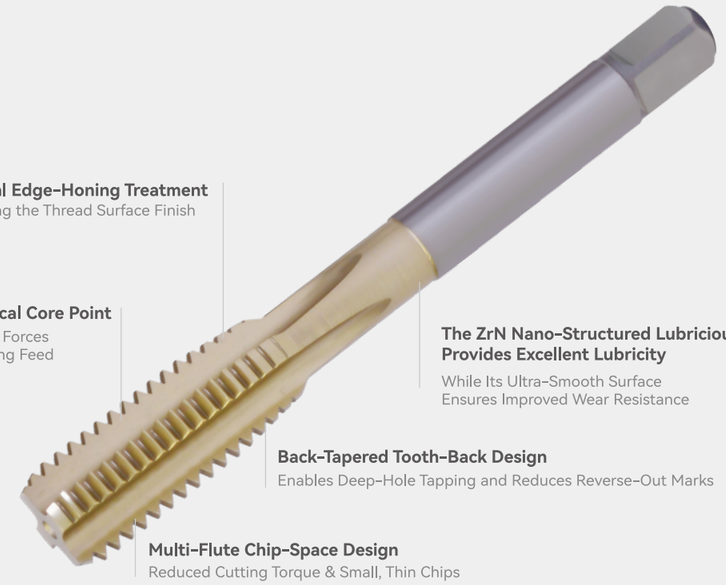
JIS-L100	EDP NO.ZrN	EDP NO.CrN+X	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S336JL213-M3x0.5	S330JL213-M3x0.5	M3	0.5	4.0	3.2	100	10.0	20	3	6H
	S336JL213-M4x0.7	S330JL213-M4x0.7	M4	0.7	5.0	4.0	100	13.0	27	3	6H
	S336JL213-M5x0.8	S330JL213-M5x0.8	M5	0.8	5.5	4.5	100	16.0	33	3	6H
	S336JL213-M6x1.0	S330JL213-M6x1.0	M6	1.0	6.0	4.5	100	19.0	40	3	6H
	S336JL213-M8x1.0	S330JL213-M8x1.0	M8	1.0	6.2	5.0	100	22.0	40	3	6HX
	S336JL213-M8x1.25	S330JL213-M8x1.25	M8	1.25	6.2	5.0	100	22.0	40	3	6H
	S336JL213-M10x1.0	S330JL213-M10x1.0	M10	1.0	7.0	5.5	100	24.0	41	3	6HX
	S336JL213-M10x1.25	S330JL213-M10x1.25	M10	1.25	7.0	5.5	100	24.0	41	3	6HX
	S336JL213-M10x1.5	S330JL213-M10x1.5	M10	1.5	7.0	5.5	100	24.0	41	3	6H
	S336JL213-M12x1.25	S330JL213-M12x1.25	M12	1.25	8.5	6.5	100	24.0	48	3	6HX
	S336JL213-M12x1.5	S330JL213-M12x1.5	M12	1.5	8.5	6.5	100	24.0	48	3	6HX
	S336JL213-M12x1.75	S330JL213-M12x1.75	M12	1.75	8.5	6.5	100	24.0	48	3	6H

■ YONGPUPRECISION

YPP Tap® ST100
Coated Straight-Flute Tap

M DIN 13 | M JIS | 6HX | ≤ 3.5xD1 | E=1.5 | 32HRC 1200 ~700 N/mm²

K P M



Special Edge-Honing Treatment
Ensuring the Thread Surface Finish

Optimized Helical Core Point
Reduced Cutting Forces
During the Tapping Feed

The ZrN Nano-Structured Lubricious Coating Provides Excellent Lubricity
While Its Ultra-Smooth Surface
Ensures Improved Wear Resistance

Back-Tapered Tooth-Back Design
Enables Deep-Hole Tapping and Reduces Reverse-Out Marks

Multi-Flute Chip-Space Design
Reduced Cutting Torque & Small, Thin Chips

- Optimized flute geometry suited to cast iron, ductile (nodular) iron, alloy steel, and carbon steel
- Optimized multi-flute design ensures effective chip evacuation for short-chipping materials in both through- and blind-hole tapping
- Suitable for both synchronized and non-synchronized tapping
- High-performance HSS-E substrate combined with PVD coating delivers long, stable tool life and reliable performance

YPP Tap® ST100
High-Performance Universal Coated Tap

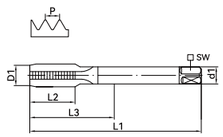


YPP Tap® JIS Series
High Productivity Straight Flute Tap

M JIS | 6HX

≤ 3.5xD1 | E=1.5 | 32HRC 1200 ~700 N/mm²

	P	M	K	N	S	H	O
ZrN	●●	●●	●●				

JIS	EDP NO.AlCrN	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S336J215-M3x0.5	M3	0.5	4.0	3.2	46	10.0	19	4	6HX
	S336J215-M4x0.7	M4	0.7	5.0	4.0	52	12.0	20	4	6HX
	S336J215-M5x0.8	M5	0.8	5.5	4.5	60	14.0	24	4	6HX
	S336IJ215-M6x1.0	M6	1.0	6.0	4.5	62	16.0	29	4	6HX
	S336IJ215-M8x1.0	M8	1.0	6.2	5.0	70	21.0	37	4	6HX
	S336IJ215-M8x1.25	M8	1.25	6.2	5.0	70	21.0	37	4	6HX
	S336IJ215-M10x1.0	M10	1.0	7.0	5.5	75	23.0	41	4	6HX
	S336IJ215-M10x1.25	M10	1.25	7.0	5.5	75	23.0	41	4	6HX
	S336IJ215-M10x1.5	M10	1.5	7.0	5.5	75	23.0	41	4	6HX
	S336IJ215-M12x1.25	M12	1.25	8.5	6.5	82	24.0	48	4	6HX
	S336IJ215-M12x1.5	M12	1.5	8.5	6.5	82	24.0	48	4	6HX
	S336IJ215-M12x1.75	M12	1.75	8.5	6.5	82	24.0	48	4	6HX
	S336IJ215-M14x1.5	M14	1.5	10.5	8.0	88	24.0	48	4	6HX
	S336IJ215-M14x2.0	M14	2.0	10.5	8.0	88	24.0	48	4	6HX
	S336IJ215-M16x1.5	M16	1.5	12.5	10.0	95	24.0	52	4	6HX
	S336IJ215-M16x2.0	M16	2.0	12.5	10.0	95	24.0	52	4	6HX
	S336IJ215-M18x1.5	M18	1.5	14.0	11.0	100	24.0	55	4	6HX
	S336IJ215-M18x2.5	M18	2.5	14.0	11.0	100	24.0	55	4	6HX
	S336IJ215-M20x1.5	M20	1.5	15.0	12.0	105	26.0	58	4	6HX
	S336IJ215-M20x2.5	M20	2.5	15.0	12.0	105	26.0	58	4	6HX
	S336IJ215-M24x3.0	M24	3.0	19.0	15.0	120	32.0	66	4	6HX

YPP Tap® ST100
High-Performance Universal Coated Tap

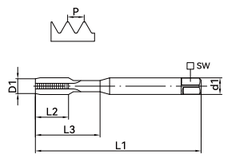


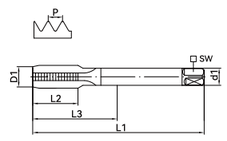
YPP Tap® JIS Series
High Productivity Straight Flute Tap

M DIN 13 | 6HX

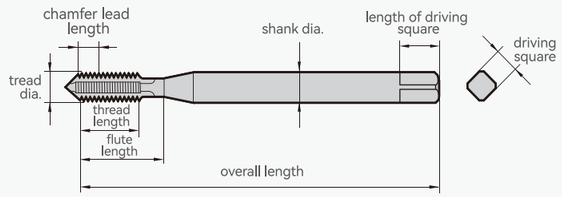
≤ 3.5xD1 | C=2-3 | 32HRC 1200 ~700 N/mm²

	P	M	K	N	S	H	O
AlCrN	●●	●	●●				

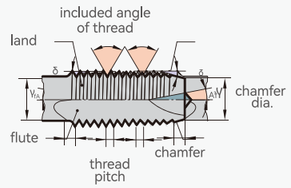
DIN371	EDP NO.AlCrN	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S332ID215-M3x0.5	M3	0.5	3.5	2.7	56	10.0	18	4	6HX
	S332ID215-M4x0.7	M4	0.7	4.5	3.4	63	13.0	21	4	6HX
	S332ID215-M5x0.8	M5	0.8	6.0	4.9	70	16.0	25	4	6HX
	S332ID215-M6x1.0	M6	1.0	6.0	4.9	80	18.0	30	4	6HX
	S332ID215-M8x1.0	M8	1.0	8.0	6.2	90	20.0	35	4	6HX
	S332ID215-M8x1.25	M8	1.25	8.0	6.2	90	20.0	35	4	6HX
	S332ID215-M10x1.0	M10	1.0	10.0	8.0	100	20.0	39	4	6HX
	S332ID215-M10x1.25	M10	1.25	10.0	8.0	100	20.0	39	4	6HX
	S332ID215-M10x1.5	M10	1.5	10.0	8.0	100	20.0	39	4	6HX

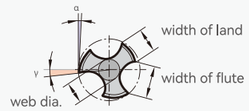
DIN376	EDP NO.AlCrN	D1	P(mm)	d1(mm)	SW	L1(mm)	L2(mm)	L3(mm)	Number of Flute	TAP Tolerance
	S332ID215-M12x1.25	M12	1.25	9.0	7.0	110	25.0	--	4	6HX
	S332ID215-M12x1.5	M12	1.5	9.0	7.0	110	25.0	--	4	6HX
	S332ID215-M12x1.75	M12	1.75	9.0	7.0	110	25.0	--	4	6HX
	S332ID215-M14x1.5	M14	1.5	11.0	9.0	110	25.0	--	4	6HX
	S332ID215-M14x2.0	M14	2.0	11.0	9.0	110	25.0	--	4	6HX
	S332ID215-M16x1.5	M16	1.5	12.0	9.0	110	25.0	--	4	6HX
	S332ID215-M16x2.0	M16	2.0	12.0	9.0	110	25.0	--	4	6HX
	S332ID215-M18x1.5	M18	1.5	14.0	11.0	125	25.0	--	4	6HX
	S332ID215-M18x2.5	M18	2.5	14.0	11.0	125	25.0	--	4	6HX
	S332ID215-M20x1.5	M20	1.5	16.0	12.0	140	28.0	--	4	6HX
	S332ID215-M20x2.5	M20	2.5	16.0	12.0	140	28.0	--	4	6HX
	S332ID215-M24x3.0	M24	3.0	18 .0	14.5	160	32.0	--	4	6HX

General Information



δ = chamfer angle
γ_{ax} = spiral point angle
α = clearance angle
γ = rake angle





Flute Forms



straight fluted, form C
without spiral point



helix angle
15°

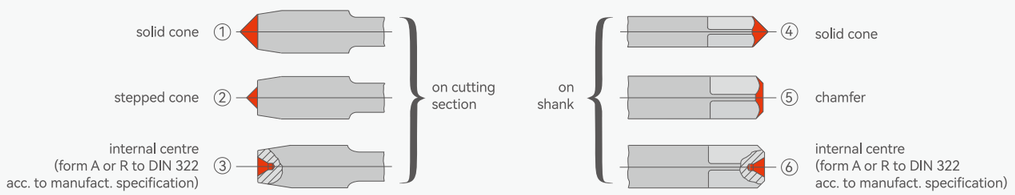


straight fluted, form B
with spiral point



helix angle
40°

Types of Centres (Standard, to DIN 2197/DIN 2175)

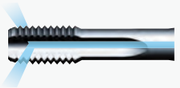


Thread dia. range mm	Centre on cutting section		Centre on shank
	with chamfer forms A, C, D, E	with chamfer form B	
≤ 4.2	①	①	④ ⑤ ⑥
> 4.2 … 5.6	① ②	①	④ ⑤ ⑥
> 5.6 … 10.0	① ② ③	① ② ③	④ ⑤ ⑥
> 10.0	③	③	⑥

Coolant Duct Geometries



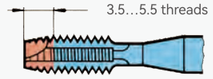
axial coolant delivery with axial coolant duct exit



axial coolant delivery with radial coolant duct exit in the flutes at the chamfer

Threading Chamfer Type

Form B



3.5…5.5 threads

medium, 3.5 – 5.5 threads,
with spiral point,
for all through holes
and deep tapping holes in medium
and long-chipping materials

Form C



2…3 threads

short, 2 – 3 threads
for blind holes
and generally for
aluminium, grey cast iron
and brass

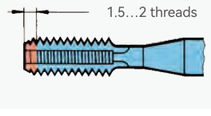
Form D



3.5…5 threads

medium, 3.5 – 5 threads
for short
through holes

Form E

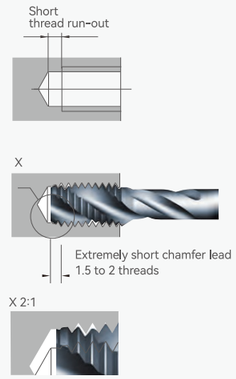


1.5…2 threads

extremely short, 1.5–2 threads,
for blind holes with
little run-out depth.

Selection of E-Type Cutting Cone

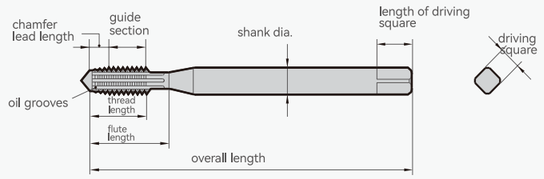
In addition to the conventional Form B and C for machine taps we are increasingly including Form E tools in our standard range. Thus, we are taking into account the increasing demand for taps with which threads can be produced as close as possible to the bottom of the bore when machining blind holes and to produce deepest threads as possible when machining through holes.

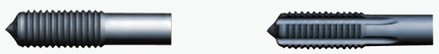


Type E taps have very short chamfered leads, with only 1.5 to 2 threads. In the machining center and tapping chuck, compared with B and C, the tool steering is shorter and the cutting torque is lower. Rigid tool clamping is adopted. In the production and application of E-type taps, the processing of fully covered threads has significant advantages.

Threading Hole Making

Thread Portion

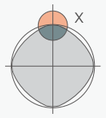




without oil grooves

with oil grooves

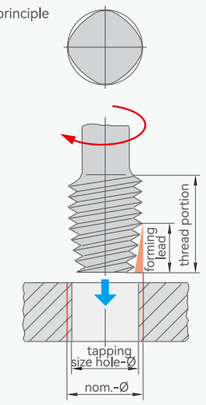
Cross section of fluteless tap



detail x
D1 = flank diameter
D = nominal diameter



The principle



Types of tapping size hole



with fluteless taps without oil grooves
for thread depth ≤ 1 x D

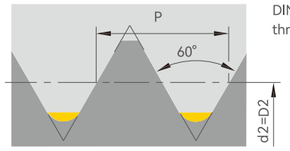
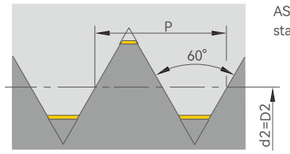
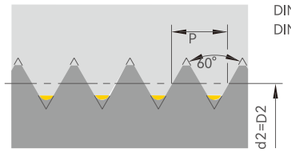
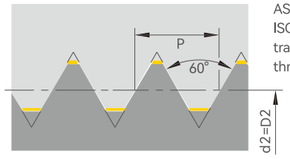
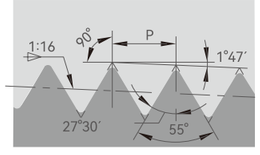


for thread depth ≥ 1 x D



with fluteless taps with oil grooves
for all thread depths

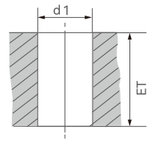
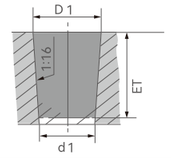
Types and Characteristics

Geometry drawing	StandardApplication
M ISO-metric thread	
	DIN 13-1General standard thread
UNC Unified National Coarse Thread	
	ASME B1.1General UN standard thread
MF ISO-metric fine thread	
	DIN 13-2 to DIN 13-11 General fine thread
UNF Unified National Fine Thread	
	ASME B1.1 ISO-metric trapezoidal thread General UN fine thread
PT Taper Pipe Thread (identical to Rc and BSPT)	
	JIS B 0203 Japanese Industrial Standard Internal thread for pipe threads and fittings

external thread | internal thread | play

Pre-Hole for Threading Hole

Std. ISO metric threads DIN 13					ISO metric fine threads DIN 13					UNC threads ASME B1.1					UNF threads ASME B1.1				
nom. Ø	pitch P	tapping size hole Ø DIN 336	core diameter of int. thread 6H min.	core diameter of int. thread 6H max.	nom. Ø	x pitch P	tapping size hole Ø DIN 336	core diameter of int. thread 6H min.	core diameter of int. thread 6H max.	nom. Ø	threads per	tapping size hole Ø DIN 336	core diameter of int. thread 2B min.	core diameter of int. thread 2B max.	nom. Ø	threads per	tapping size hole Ø DIN 336	core diameter of int. thread 2B min.	core diameter of int. thread 2B max.
	mm	mm	mm	mm		mm	mm	mm	mm		inch	mm	mm	mm		inch	mm	mm	mm
M 1	0.25	0.75	0.729	0.785	M 4.0	x 0.50	3.50	3.459	3.599	Nr. 1 -	64	1.55	1.425	1.580	Nr. 1 -	72	1.55	1.473	1.610
M 1.1	0.25	0.85	0.829	0.885	M 4.5	x 0.50	4.00	3.959	4.099	Nr. 2 -	56	1.85	1.694	1.872	Nr. 2 -	64	1.85	1.755	1.910
M 1.2	0.25	0.95	0.929	0.985	M 5.0	x 0.50	4.50	4.459	4.599	Nr. 3 -	48	2.10	1.941	2.146	Nr. 3 -	56	2.15	2.024	2.197
M 1.4	0.30	1.10	1.075	1.142	M 5.5	x 0.50	5.00	4.959	5.099	Nr. 4 -	40	2.35	2.157	2.385	Nr. 4 -	48	2.40	2.271	2.459
M 1.6	0.35	1.25	1.221	1.321	M 6.0	x 0.75	5.20	5.188	5.378	Nr. 5 -	40	2.65	2.487	2.698	Nr. 5 -	44	2.70	2.550	2.741
M 1.8	0.35	1.45	1.421	1.521	M 7.0	x 0.75	6.20	6.188	6.378	Nr. 6 -	32	2.85	2.642	2.896	Nr. 6 -	40	2.95	2.819	3.023
M 2	0.40	1.60	1.567	1.679	M 8.0	x 0.50	7.50	7.459	7.599	Nr. 8 -	32	3.50	3.302	3.531	Nr. 8 -	36	3.50	3.404	3.607
M 2.2	0.45	1.75	1.713	1.838	M 8.0	x 0.75	7.20	7.188	7.378	Nr. 10 -	24	3.90	3.683	3.937	Nr. 10 -	32	4.10	3.962	4.166
M 2.5	0.45	2.05	2.013	2.138	M 8.0	x 1.00	7.00	6.917	7.153	Nr. 12 -	24	4.50	4.343	4.597	Nr. 12 -	28	4.60	4.496	4.724
M 3	0.50	2.50	2.459	2.599	M 9.0	x 0.75	8.20	8.188	8.378	1/4 -	20	5.10	4.978	5.258	1/4 -	28	5.50	5.359	5.588
M 3.5	0.60	2.90	2.850	3.010	M 9.0	x 1.00	8.00	7.917	8.153	5/16 -	18	6.60	6.401	6.731	5/16 -	24	6.90	6.782	7.036
M 4	0.70	3.30	3.242	3.422	M 10	x 0.75	9.20	9.188	9.378	3/8 -	16	8.00	7.798	8.153	3/8 -	24	8.50	8.382	8.636
M 4.5	0.75	3.70	3.688	3.878	M 10	x 1.00	9.00	8.917	9.153	7/16 -	14	9.40	9.144	9.550	7/16 -	20	9.90	9.728	10.033
M 5	0.80	4.20	4.134	4.334	M 10	x 1.25	8.80	8.647	8.912	1/2 -	13	10.80	10.592	11.024	1/2 -	20	11.50	11.328	11.608
M 6	1.00	5.00	4.917	5.153	M 11	x 0.75	10.20	10.188	10.378	9/16 -	12	12.20	11.989	12.446	9/16 -	18	12.90	12.751	13.081
M 7	1.00	6.00	5.917	6.153	M 11	x 1.00	10.00	9.917	10.153	5/8 -	11	13.50	13.386	13.868	5/8 -	18	14.50	14.351	14.681
M 8	1.25	6.80	6.647	6.912	M 12	x 1.00	11.00	10.917	11.153	3/4 -	10	16.50	16.307	16.840	3/4 -	16	17.50	17.323	17.678
M 9	1.25	7.80	7.647	7.912	M 12	x 1.25	10.80	10.647	10.912	7/8 -	9	19.50	19.177	19.761	7/8 -	14	20.40	20.269	20.650
M 10	1.50	8.50	8.376	8.676	M 12	x 1.50	10.50	10.376	10.676	1 -	8	22.25	21.971	22.606	1 -	12	23.25	23.114	23.571
M 11	1.50	9.50	9.376	9.676	M 14	x 1.00	13.00	12.917	13.153						1 1/8 -	12	26.50	26.289	26.746
M 12	1.75	10.20	10.106	10.441	M 14	x 1.25	12.80	12.647	12.912						1 1/4 -	12	29.50	29.464	29.921
M 14	2.00	12.00	11.835	12.210	M 14	x 1.50	12.50	12.376	12.676						1 3/8 -	12	32.75	32.639	33.096
M 16	2.00	14.00	13.835	14.210	M 15	x 1.00	14.00	13.917	14.153						1 1/2 -	12	36.00	35.814	36.271
M 18	2.50	15.50	15.294	15.744	M 15	x 1.50	13.50	13.376	13.676										
M 20	2.50	17.50	17.294	17.744	M 16	x 1.00	15.00	14.917	15.153										
M 22	2.50	19.50	19.294	19.744	M 16	x 1.25	14.80	14.647	14.912										
M 24	3.00	21.00	20.752	21.252	M 16	x 1.50	14.50	14.376	14.676										
M 27	3.00	24.00	23.752	24.252	M 17	x 1.00	16.00	15.917	16.153										
M 30	3.50	26.50	26.211	26.771	M 17	x 1.50	15.50	15.376	15.676										
					M 18	x 1.00	17.00	16.917	17.153										
					M 18	x 1.50	16.50	16.376	16.676										
					M 20	x 1.00	19.00	18.917	19.153										
					M 20	x 1.50	18.50	18.376	18.676										
					M 20	x 2.00	18.00	17.835	18.210										

PT JIS B 0203 TAPER PIPE THREAD CONE 1:16				
nom. Ø	threads per inch	tapping size hole Ø Version A d1	tapping size hole Ø Version B D1	cutting depth ET
			Ø	
				mm
PT 1/16	-28	6.20	6.60	6.20
PT 1/16	-28	8.20	8.60	6.20
PT 1/16	-19	10.90	11.50	9.40
PT 1/16	-19	14.40	15.00	9.70
PT 1/16	-14	17.90	18.70	12.70
PT 1/16	-14	23.30	24.20	14.10
PT 1/16	-11	29.30	30.30	16.20
		Version A (avoid if possible) 	Version B 	

Pre-Hole for Threading Hole

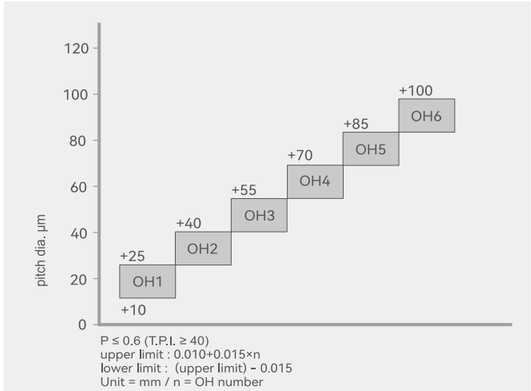
Std. ISO metric threads DIN 13						
nom. Ø	pitch P	tapping size hole Ø	tapping size hole Ø		core diameter of int. thread 7H	
			min.	max.	min.	max.
	mm	mm	mm	mm	mm	mm
M 1	0.25		0.729	0.785		
M 1.1	0.25		0.829	0.885		
M 1.2	0.25		0.929	0.985		
M 1.4	0.30		1.076	1.142		
M 1.6	0.35		1.221	1.321		
M 1.8	0.35		1.421	1.521		
M 2	0.40	1.85	1.84	1.88	1.567	1.679
M 2,2	0.45	2.00	2.01	2.05	1.713	1.838
M 2,5	0.45	2.30	2.28	2.32	2.013	2.138
M 3	0.50	2.80	2.78	2.85	2.459	2.639
M 3,5	0.60	3.25	3.23	3.30	2.850	3.050
M 4	0.70	3.70	3.68	3.76	3.242	3.466
M 4,5	0.75	4.20				
M 5	0.80	4.65	4.62	4.71	4.134	4.384
M 6	1.00	5.55	5.52	5.62	4.917	5.217
M 7	1.00	6.55	6.52	6.62	5.917	6.217
M 8	1.25	7.40	7.36	7.47	6.647	6.982
M 9	1.25	8.40	8.36	8.47	7.647	7.982
M 10	1.50	9.30	9.26	9.38	8.376	8.751
M 11	1.50	10.30	10.26	10.38	9.376	9.751
M 12	1.75	11.20	11.15	11.29	10.106	10.531
M 14	2.00	13.10	13.05	13.20	11.835	12.310
M 16	2.00	15.10	15.05	15.20	13.835	14.310
M 18	2.50	16.90	16.83	17.02	15.294	15.854
M 20	2.50	18.90	18.83	19.02	17.294	17.854

Std. ISO metric fine threads DIN 13							
nom. Ø	x	pitch P	tapping size hole Ø	tapping size hole Ø		core diameter of int. thread 7H	
				min.	max.	min.	max.
		mm	mm	mm	mm	mm	mm
M 6	x	0.75	5.65	5.62	5.70	5.188	5.424
M 7	x	0.75	6.65	6.62	6.70	6.188	6.424
M 8	x	0.75	7.65	7.62	7.70	7.188	7.424
M 8	x	1.00	7.55	7.52	7.62	6.917	7.217
M 9	x	0.75	8.65	8.62	8.70	8.188	8.424
M 9	x	1.00	8.55	8.52	8.62	7.917	8.217
M 10	x	0.75	9.65	9.62	9.70	9.188	9.424
M 10	x	1.00	9.55	9.52	9.62	8.917	9.217
M 10	x	1.25	9.40	9.36	9.47	8.647	8.982
M 11	x	0.75	10.65	10.62	10.70	10.188	10.424
M 11	x	1.00	10.55	10.52	10.62	9.917	10.217
M 12	x	1.00	11.55	11.52	11.62	10.917	11.217
M 12	x	1.25	11.40	11.36	11.47	10.647	10.982
M 12	x	1.50	11.30	11.26	11.38	10.376	10.751
M 14	x	1.00	13.55	13.52	13.62	12.917	13.217
M 14	x	1.25	13.40	13.36	13.47	12.647	12.982
M 14	x	1.50	13.30	13.26	13.38	12.376	12.751
M 15	x	1.00	14.55	14.52	14.62	13.917	14.217
M 15	x	1.50	14.30	14.26	14.38	13.376	13.751
M 16	x	1.00	15.55	15.52	15.62	14.917	15.217
M 16	x	1.50	15.30	15.26	15.38	14.376	14.751
M 20	x	1.50	19.30	19.26	19.38	18.376	19.751

Tolerance of Cutting Tap

Pitch ≤ 0.6

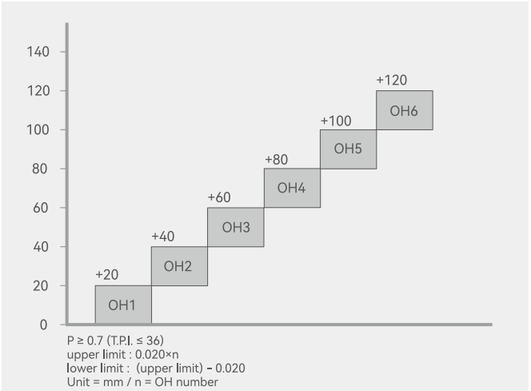
OH limits



P ≤ 0,6 (T.P.I. ≥ 40)
upper limit : 0.010+0.015×n
lower limit : (upper limit) – 0.015
Unit = mm / n = OH number

Pitch ≥ 0.7

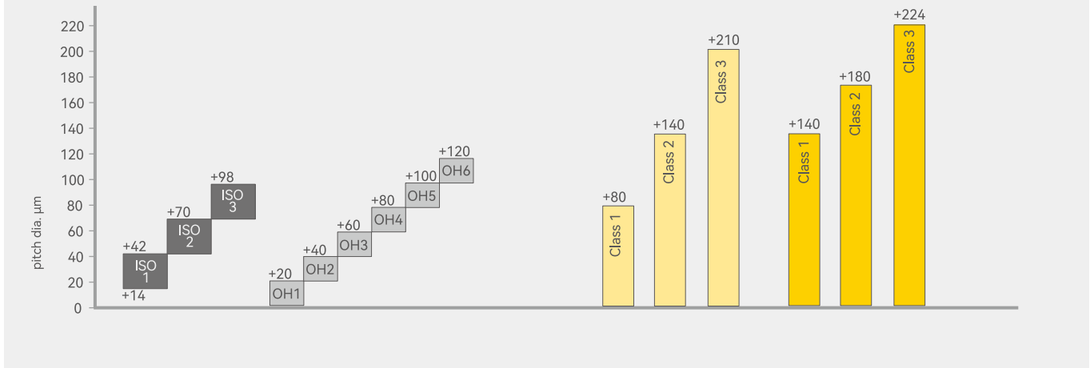
OH limits



P ≥ 0.7 (T.P.I. ≤ 36)
upper limit : 0.020×n
lower limit : (upper limit) – 0.020
Unit = mm / n = OH number

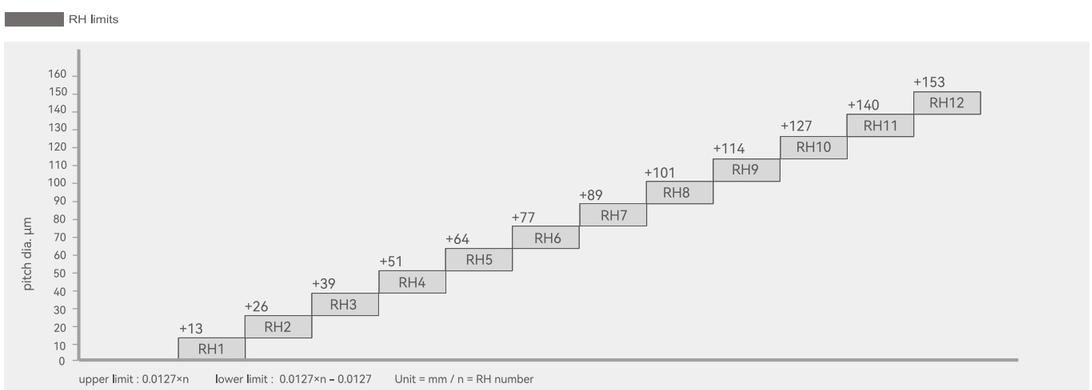
Example M10 (x 1.5)

ISO limits
OH limits
JIS internal thread
ISO internal thread



RH Limits for Fluteless Taps

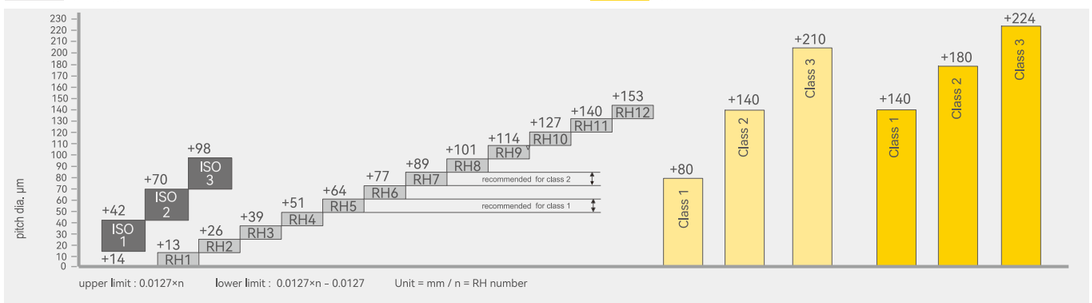
RH limits



upper limit : 0.0127×n lower limit : 0.0127×n – 0.0127 Unit = mm / n = RH number

Example M10 (x 1.5)

ISO limits
RH limits
JIS internal thread
ISO internal thread



upper limit : 0.0127×n lower limit : 0.0127×n – 0.0127 Unit = mm / n = RH number

Tap Test Report

Tap Type	☐ Spiral Flute		☐ Straight Flute		☐ Coating	☐ Uncoated
Ordering Code						
Machining Conditions	Machine , Manufacturer and Power:	☐ MK	☐ SK	☐ HSK	☐ TR	☐ Others
	Spindle Connection Mode	☐ DIN	☐ ANSI	☐ JIS	☐ Others	
	Process		Workpiece Material / Description			
	Heat Treatment		Tensile Strength		N/mm^2	
	Hardness		Elongation		%	
Process Requirements	Processing Mode	☐ Horizontal Cutting	☐ Vertical Cutting	☐ Tool Rotation	☐ Tool Stationary	
	Tool Life	New Product Life_____		Service Life of Grinding and Repainting_____		
	Tool Change Reason	☐ Load	☐ Surface Quality	☐ Size	☐ Other	
	Cutting parameters	Speed_____min^{-1}		Cutting Speed_____m/min		
Feed mode	☐ Cam-Type	☐ Sydraulic	☐ Screw	☐ CIVC		
	☐ Synchronous	☐ Gear Type	☐ Other			
Tool Clamping Mode	☐ ER Collet	☐ Tap Collet mode	☐ Automatic Reversing Collet Mode	☐ Overload Protection Device Mode		
	☐ With Length Compensation Device	☐ With Axial Adjustment Mode	☐ In band cooling transmission mode_____bar			
Lubrication Conditions	☐ Oil	☐ Emulsion_____%	☐ Dry Cutting	☐ Loop		
	☐ Grease	☐ Little Lubrication	☐ Other _____			
Processing	Tool brand			Sketch of Parts or Machining Parts		
	Cutting Parameters	Cutting Speed (vm/min)				
		Rotating Speed (nr/min)				
		Feed Rate (vfmm/min)				
	Result	Processing State and Quality		When tool failure occurs, please indicate the quantity machined at failure _____pieces/ _____meters		
		Tool Life				
Conclusion and Advise						

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YPP TAP® SERIES
SOLID ROUND TOOLS
ONE-STOP MACHINING SOLUTION

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Suzhou Yongpu Precision Technology Co., Ltd.

Solid Round Tools | One-stop Machining Solution

YPP Tap®

SUS-ASF

HSS Spiral-Flute Taps for Stainless Steel



Product line	YPP Tap® – taps
Type	JIS-series spiral-flute tap, CrN+X coated, HSSE
Workpiece	ISO-M stainless steel

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Solid Round Tools | One-stop Machining Solution

One-stop service | Non-standard customization | Backed by more than a century of technical expertise

Tool Design Features



- **51° high-helix design for superior chip evacuation** – capable of tapping deep-hole threads up to 3D
- **New CrN coating with a lower surface friction coefficient** – lower cutting resistance when machining sticky materials such as stainless steel
- **Specially designed back taper on the threaded section prevents thread chipping during cutting** – while further reducing cutting resistance

Applications

Workpiece materials: ISO-M stainless steel; particularly suitable for deep-hole tapping.

Industries: widely used across all kinds of machining industries.

Ordering Code

528	JIS	S365	ASF	M8x1.25	6HX
1	2	3	4	5	6

Pos.	Code	Meaning
1	528	Product category: 528 = tap
2	JIS	Shape standard: JIS = Japanese standard, DIN = German standard
3	S365	S365 = HSSE tap for stainless steel; K469 = HSPM (powder-metallurgy HSS) tap for stainless steel
4	ASF	ASF = spiral-flute tap; LASF = extended-length spiral-flute tap
5	M8x1.25	Thread size
6	6HX	Thread tolerance class: 6H, 6G, 6HX

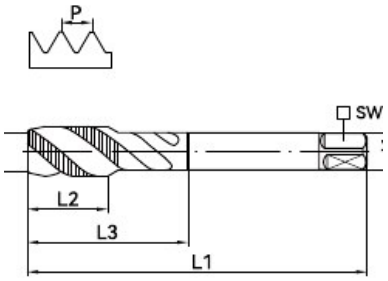
Standard Specifications

Coated taps for stainless steel – SUS-ASF

JIS series – spiral-flute tap for stainless steel (JIS series SUS flute tap)

Key data: Metric thread M (JIS) | Tolerance 6HX | Blind hole | Thread depth ≤ 3.5×D1 | Chamfer C = 2–3 threads | Helix angle 51° | Workpiece ≤ 28 HRC / 700–1000 N/mm² | Coating CrN+X

Material suitability (ISO): P – M ●● K – N – S – H – O – (●● = recommended application; the leaflet gives no further legend)



JIS – Tool No. (EDP No.) CrN+X	Diameter D1	Pitch P (mm)	Shank diameter d1 (mm)	Square SW	Overall length L1 (mm)	Thread length L2 (mm)	Neck length L3 (mm)	Number of flutes	Tap tolerance
S365J217-M3x0.5	M3	0.5	4.0	3.2	46	10.0	19	3	6HX
S365J217-M4x0.7	M4	0.7	5.0	4.0	52	8.4	20	3	6HX
S365J217-M5x0.8	M5	0.8	5.5	4.5	60	9.6	24	3	6HX
S365J217-M6x1.0	M6	1.0	6.0	4.5	62	12.0	29	3	6HX
S365J217-M8x1.25	M8	1.25	6.2	5.0	70	15.0	37	3	6HX
S365J217-M10x1.5	M10	1.5	7.0	5.5	75	18.0	41	3	6HX
S365J217-M12x1.75	M12	1.75	8.5	6.5	82	18.0	48	3	6HX

Contact

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