

Tap-Star

High performance threading Tap

- High toughness HSS substrate for improved chipping resistance
- Optimally designed shape for various workpiece cutting



High performance threading Tap

Tap-Star

KORLOY launched the HSS Tap with various advantages such as price and quality in order to increase customer productivity.

The Tap-Star has increased tool life from applying toughness improved HSS substrate and special treatment of chamfer cutting edge enhancing chipping resistance and its TiAlN coating ensures high oxidation resistance and wear resistance.

KORLOY Tap-Star HSS Tap provides threading solution increasing customer productivity with long tool life and high efficient machining.

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» **Higher chipping resistance**

- Reduced chipping due to applying high toughness substrate
- Special chamfer edge treatment

» **Optimal shape**

- Flute shape for smooth chip evacuation
- Designed with optimal relief angle for high chipping resistance

» **Higher wear resistance**

- TiAlN coating with high temperature oxidation resistance

» **Cost efficiency of tool**

- Providing the best performance and quality



Code system

S	V	R	O	M	09	100	40	S
Tap-Star	Substrate V: HSSE P: HSS PM W: CARBIDE	Type S: Straight (JIS) P: Spiral (JIS) N: Point (JIS) G: Straight (DIN) D: Point (DIN) Q: Spiral (DIN)	Surface treatment O: Bright A: TiAlN N: Nitride	Thread M: Meter thread	Size 06: M6 12: M12	Pitch 050: 0.5 100: 1.0 150: 1.5	Chamfer length 15: 1.5P 25: 2.5P 50: 5.0P	Oil groove S: 1 oil groove M: 4 oil grooves

Features

Optimal flute shape

- Smooth chip flow



ISO13399 Terms

TDZ	Thread diameter size
TP	Thread pitch
LU	Usable length (max. recommended)
CZCMS	Connection size code machine side
DCON-MS	Connection diameter machine side
TD	Thread diameter
LF	Functional length
THL	Thread length
NOF	Flute count
PHD	Premachined hole diameter
BSG	Basic standard group
TCDMM	Shank diameter tolerance
THCHT	Threading chamfer type
TCTR	Thread tolerance class
DN	Neck diameter

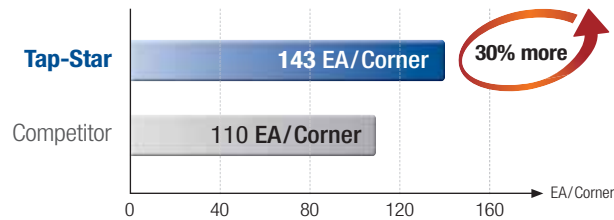
Icon guide

Shank type		Tool type		Coating		Workpiece		Chamfer lead		Thread type		Class of thread		Substrate	
DIN	DIN	Spiral flute	SFT	Un-coated	Bright	Black ring	P(K)	Form C (chamfer lead 2~3 Thread)	C form	M	M	6H	6H	HSSE	HSSE
JIS	JIS	Spiral point	SPT	HOMO	HOMO	Green ring	K	Form B (chamfer lead 4~5 Thread)	B form	MF	MF	ISO H2/3/4	H2/3/4	HSS-PM	HSS PM
-	-	Straight	STT	Nitride	Nitride	Blue ring	M(H)	Form E (chamfer lead 1.5~2 Thread)	E form	-	-	-	-	Carbide	Car-bide
-	-	Roll	RT	TiN	TiN	Yellow ring	N	-	-	-	-	-	-	-	-
-	-	Spiral Roll	SRT	TiCN	TiCN	-	-	-	-	-	-	-	-	-	-
-	-	-	-	TiAlN	TiAlN	-	-	-	-	-	-	-	-	-	-

Application examples

Alloy steel (SNCM439)

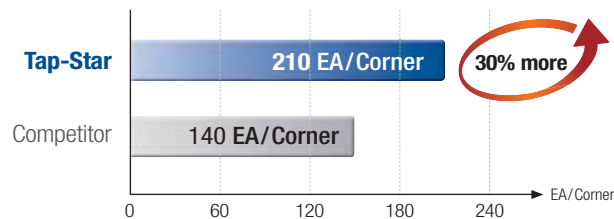
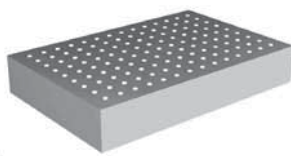
Workpiece use	Cutting tool
Cutting condition	Drill diameter (Ø) = 4, vc (m/min) = 5, ap (mm) = 13, wet
Tool	SVDAM0407050



>> 30% longer tool life than competitor

Pre-hardened steel (KP4M)

Workpiece use	Plate
Cutting condition	Drill diameter (Ø) = 10, vc (m/min) = 8, ap (mm) = 15, wet
Tool	SVQAM1015025



>> 30% longer tool life than competitor

Recommended cutting conditions

: Recommended : Applicable : Usable : unusable

Workpiece			Cutting speed, vc (m/min)					Cutting fluid			
ISO	Workpiece material		Straight Tap	Spiral Tap	Point Tap	Carbide Tap	Roll Tap	Insoluble	Water soluble (emulsion)	Semi dry	Dry
P	Low carbon steel	≤ C 0.25%	8~13	8~13	15~25	-	8~13				
	Medium carbon steel	C 0.25 ~ 0.45%	7~12	7~12	10~15	-	7~10				
	High carbon steel	≥ C 0.45%	6~9	6~9	8~13	-	5~8				
	Alloy steel	SCM	7~12	7~12	10~15	-	5~8				
	Quenched and tempered steel	25~45HRC	3~5	3~5	4~6	-	-			-	-
	Tool steel	SKD	6~9	6~9	7~10	-	-		-	-	-
M	Cast steel	SCM	6~11	6~11	10~15	-	-			-	-
	Stainless steel	SUS	4~7	5~8	8~13	-	5~10			-	-
	Precipitation hardened stainless steel	SUS630 SUS631	3~5	3~5	4~6	-	-		-	-	-
K	Cast iron	FC	10~15	-	-	10~20	-				
	Ductile cast iron	FCD	7~12	7~12	10~20	10~20	-				-
N	Copper	Cu	6~9	6~11	7~12	10~20	7~12			-	-
	Brass, brass-cast	Bs Bsc	10~15	10~20	15~25	15~25	7~12				
	Bronze, bronze-cast	PB PBC	6~11	6~11	10~20	10~20	7~12			-	-
	Rolled aluminum	Al	10~20	10~20	15~25	-	10~20				-
	Aluminum-cast, alloyed	AC ACD	10~15	10~15	15~20	10~20	10~25				-
	Magnesium-cast, alloyed	MC	7~12	7~12	10~15	10~20	-				-
	Zinc-cast, alloyed	ZDC	1~12	7~12	10~15	10~20	7~12				-
	Thermosetting plastic	Bakelite phenol epoxy	10~20	-	-	15~25	-	-			
	Thermoplastic	Nylon vinyl chloride	10~20	10~15	10~20	10~20	-	-			

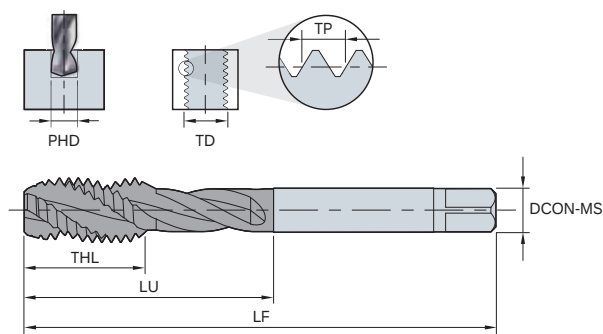
 Line-up

Type		Designation	Picture	Product name	Coated	Size	
						Min.	Max.
DIN	Spiral	SVQAM		Spiral flute Tap	TiAlN	M2	M24
		SVQNM			Nitride	M2	M24
		SVQOM			-	M2	M24
	Point	SVDAM		Spiral point Tap	TiAlN	M2	M24
		SVDNM			Nitride	M2	M24
		SVDOM			-	M2	M24
	Straight	SVGAM		Straight flute Tap	TiAlN	M3	M24
JIS	Spiral	SVPAM		Spiral flute Tap	TiAlN	M2	M24
		SVPNM			Nitride	M2	M24
		SVPOM			-	M2	M24
	Point	SVNAM		Spiral point Tap	TiAlN	M2	M24
		SVNNM			Nitride	M2	M24
		SVNOM			-	M2	M24
	Straight	SVSAM		Straight flute Tap	TiAlN	M3	M24

Type	Designation	Picture	Product name	Coating	Size	
					Min.	Max.
DIN	Spiral	VQOM	Spiral flute Tap	-	M3	M24
		VQTM		TiN	M3	M24
		VQCM		TiCN	M3	M24
		VQHM		HOMO	M3	M24
	Point	VDOM	Spiral point Tap	-	M3	M24
		VDTM		TiN	M3	M24
		VDCM		TiCN	M3	M24
		VDHM		HOMO	M3	M24
	Straight	VGOM	Straight flute Tap	-	M3	M24
		VGTM		TiN	M3	M24
		VGCM		TiCN	M3	M24
		VGHM		HOMO	M3	M24
	Roll	VMOM	Roll Tap	-	M3	M12
		VMTM		TiN	M3	M12
		VMCM		TiCN	M3	M12
JIS	Spiral	VPOM	Spiral flute Tap	-	M3	M24
		VPTM		TiN	M3	M24
		VPCM		TiCN	M3	M24
		VPHM		HOMO	M3	M24
	Point	VNOM	Spiral point Tap	-	M3	M24
		VNTM		TiN	M3	M24
		VNCM		TiCN	M3	M24
		VNHM		HOMO	M3	M24
	Straight	VSOM	Straight flute Tap	-	M3	M24
		VSTM		TiN	M3	M24
		VSCM		TiCN	M3	M24
		VSHM		HOMO	M3	M24
	Roll	VR0M	Roll Tap	-	M3	M12
		VRTM		TiN	M3	M12
		VRCM		TiCN	M3	M12
	Spiral	VF0M	Spiral roll Tap	-	M3	M6
		VFTM		TiN	M3	M6
		VFCM		TiCN	M3	M6

SVQAM

Spiral flute Tap



(mm)

Designation	TDZ	TP	LU	CZCMS	DCON-MS	TD	LF	THL	NOF	PHD	BSG
SVQAM											
0204025	M2	0.4	13.5	2.8 x 2.1	2.8	2	45	8	3	1.6	DIN371
025045025	M2.5	0.45	15	2.8 x 2.1	2.8	3	50	9	3	2.1	DIN371
0305025	M3	0.5	17	3.5 x 2.7	3.5	3	56	6	3	2.5	DIN371
0407025	M4	0.7	20.5	4.5 x 3.4	4.5	4	63	7.5	3	3.3	DIN371
0508025	M5	0.8	25	6 x 4.9	6	5	70	9	3	4.2	DIN371
0610025	M6	1	26	6 x 4.9	6	6	80	11	3	5	DIN371
0812525	M8	1.25	34	8 x 6.2	8	8	90	13	3	6.8	DIN371
1015025	M10	1.5	38	10 x 8	10	10	100	16	3	8.5	DIN371
1217525	M12	1.75	40	9 x 7	9	12	110	18	3	10.2	DIN376
1420025	M14	2	45	11 x 9	11	14	110	20	4	12	DIN376
1620025	M16	2	52	12 x 9	12	16	110	20	4	14	DIN376
1825025	M18	2.5	55	14 x 11	14	18	125	22	4	15.5	DIN376
2025025	M20	2.5	58	16 x 12	16	20	140	25	4	17.5	DIN376
2225025	M22	2.5	63	18 x 14.5	18	22	140	25	4	19.5	DIN376
2430025	M24	3	66	18 x 14.5	18	24	160	28	4	21	DIN376
0405025	MF4	0.5	20.5	2.8 x 2.1	2.8	4	63	7.5	3	3.5	DIN374
0505025	MF5	0.5	24	3.5 x 2.7	3.5	5	70	8	3	4.5	DIN374
0507525	MF5	0.75	24	3.5 x 2.7	3.5	5	70	8	3	4.8	DIN374
0605025	MF6	0.5	26	4.5 x 3.4	4.5	6	80	8	3	5.5	DIN374
0607525	MF6	0.75	29	4.5 x 3.4	4.5	6	80	8	3	5.3	DIN374
0805025	MF8	0.5	34	6 x 4.9	6	8	80	10	3	7.5	DIN374
0807525	MF8	0.75	34	6 x 4.9	6	8	80	10	3	7.3	DIN374
0810025	MF8	1	34	6 x 4.9	6	8	90	10	3	7	DIN374
1005025	MF10	0.5	38	7 x 5.5	7	10	90	14	3	9.5	DIN374
1007525	MF10	0.75	38	7 x 5.5	7	10	90	14	3	9.3	DIN374
1010025	MF10	1	38	7 x 5.5	7	10	90	14	3	9	DIN374
1012525	MF10	1.25	38	7 x 5.5	7	10	100	14	3	8.8	DIN374
1207525	MF12	0.75	48	9 x 7	9	12	100	14	3	11.3	DIN374
1210025	MF12	1	48	9 x 7	9	12	100	14	3	11	DIN374
1212525	MF12	1.25	48	9 x 7	9	12	100	14	3	10.8	DIN374
1215025	MF12	1.5	48	9 x 7	9	12	100	14	3	10.5	DIN374
1410025	MF14	1	48	11 x 9	11	14	100	18	3	13	DIN374
1412525	MF14	1.25	48	11 x 9	11	14	100	18	3	12.8	DIN374
1415025	MF14	1.5	48	11 x 9	11	14	100	18	3	12.5	DIN374
1610025	MF16	1	52	12 x 9	12	16	100	18	3	15	DIN374
1612525	MF16	1.25	52	12 x 9	12	16	100	18	3	14.8	DIN374
1615025	MF16	1.5	52	12 x 9	12	16	100	18	3	14.5	DIN374
1810025	MF18	1	55	14 x 11	14	18	110	18	4	17	DIN374
1815025	MF18	1.5	55	14 x 11	14	18	110	18	4	16.5	DIN374
1820025	MF18	2	55	14 x 11	14	18	125	22	4	16	DIN374
2010025	MF20	1	58	16 x 12	16	20	125	25	4	19	DIN374
2015025	MF20	1.5	58	16 x 12	16	20	125	25	4	18.5	DIN374
2020025	MF20	2	58	16 x 12	16	20	140	25	4	18	DIN374
2215025	MF22	1.5	63	18 x 14.5	18	22	125	25	4	20.5	DIN374
2415025	MF24	1.5	66	18 x 14.5	18	24	140	25	4	22.5	DIN374
2420025	MF24	2	66	18 x 14.5	18	24	140	27	4	22	DIN374

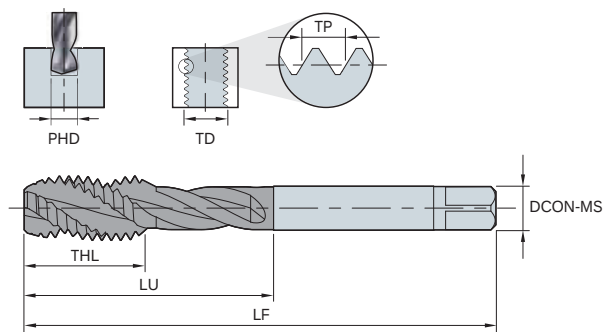
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy		Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	Al	AC ADC	MC	ZDC	Ti	Ni	-	-

SVQNM

Spiral flute Tap



(mm)

Designation		TDZ	TP	LU	CZCMS	DCON-MS	TD	LF	THL	NOF	PHD	BSG
SVQNM	0204025	M2	0.4	13.5	2.8 x 2.1	2.8	2	45	8	3	1.6	DIN371
	025045025	M2.5	0.45	15	2.8 x 2.1	2.8	3	50	9	3	2.1	DIN371
	0305025	M3	0.5	17	3.5 x 2.7	3.5	3	56	6	3	2.5	DIN371
	0407025	M4	0.7	20.5	4.5 x 3.4	4.5	4	63	7.5	3	3.3	DIN371
	0508025	M5	0.8	25	6 x 4.9	6	5	70	9	3	4.2	DIN371
	0610025	M6	1	26	6 x 4.9	6	6	80	11	3	5	DIN371
	0812525	M8	1.25	34	8 x 6.2	8	8	90	13	3	6.8	DIN371
	1015025	M10	1.5	38	10 x 8	10	10	100	16	3	8.5	DIN371
	1217525	M12	1.75	40	9 x 7	9	12	110	18	3	10.2	DIN376
	1420025	M14	2	45	11 x 9	11	14	110	20	4	12	DIN376
	1620025	M16	2	52	12 x 9	12	16	110	20	4	14	DIN376
	1825025	M18	2.5	55	14 x 11	14	18	125	22	4	15.5	DIN376
	2025025	M20	2.5	58	16 x 12	16	20	140	25	4	17.5	DIN376
	2225025	M22	2.5	63	18 x 14.5	18	22	140	25	4	19.5	DIN376
	2430025	M24	3	66	18 x 14.5	18	24	160	28	4	21	DIN376
	0405025	MF4	0.5	20.5	2.8 x 2.1	2.8	4	63	7.5	3	3.5	DIN374
	0505025	MF5	0.5	24	3.5 x 2.7	3.5	5	70	8	3	4.5	DIN374
	0607525	MF6	0.75	29	4.5 x 3.4	4.5	6	80	8	3	5.3	DIN374
	0807525	MF8	0.75	34	6 x 4.9	6	8	80	10	3	7.3	DIN374
	0810025	MF8	1	34	6 x 4.9	6	8	90	10	3	7	DIN374
	1007525	MF10	0.75	38	7 x 5.5	7	10	90	14	3	9.3	DIN374
	1010025	MF10	1	38	7 x 5.5	7	10	90	14	3	9	DIN374
	1012525	MF10	1.25	38	7 x 5.5	7	10	100	14	3	8.8	DIN374
	1210025	MF12	1	48	9 x 7	9	12	100	14	3	11	DIN374
	1212525	MF12	1.25	48	9 x 7	9	12	100	14	3	10.8	DIN374
	1215025	MF12	1.5	48	9 x 7	9	12	100	14	3	10.5	DIN374
	1410025	MF14	1	48	11 x 9	11	14	100	18	3	13	DIN374
	1415025	MF14	1.5	48	11 x 9	11	14	100	18	3	12.5	DIN374
	1610025	MF16	1	52	12 x 9	12	16	100	18	3	15	DIN374
	1615025	MF16	1.5	52	12 x 9	12	16	100	18	3	14.5	DIN374
	1810025	MF18	1	55	14 x 11	14	18	110	18	4	17	DIN374
	1815025	MF18	1.5	55	14 x 11	14	18	110	18	4	16.5	DIN374
	1820025	MF18	2	55	14 x 11	14	18	125	22	4	16	DIN374
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	2015025	MF20	1.5	58	16 x 12	16	20	125	25	4	18.5	DIN374
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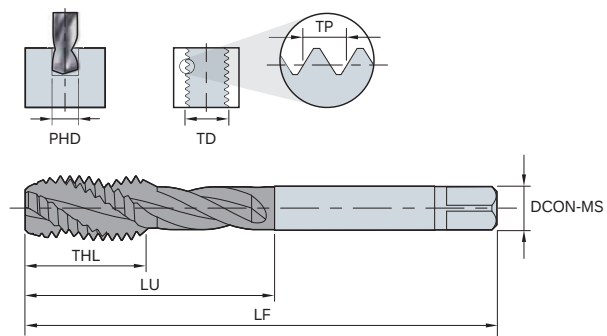
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SVQOM

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	0508025	M5	0.8	25	6 x 4.9	6	5	70	9	3	4.2	DIN371
	0610025	M6	1	26	6 x 4.9	6	6	80	11	3	5	DIN371
	0812525	M8	1.25	34	8 x 6.2	8	8	90	13	3	6.8	DIN371
	1015025	M10	1.5	38	10 x 8	10	10	100	16	3	8.5	DIN371
	1217525	M12	1.75	40	9 x 7	9	12	110	18	3	10.2	DIN376
	1420025	M14	2	45	11 x 9	11	14	110	20	4	12	DIN376
	1620025	M16	2	52	12 x 9	12	16	110	20	4	14	DIN376
	1825025	M18	2.5	55	14 x 11	14	18	125	22	4	15.5	DIN376
	2025025	M20	2.5	58	16 x 12	16	20	140	25	4	17.5	DIN376
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	0607525	MF6	0.75	29	4.5 x 3.4	4.5	6	80	8	3	5.3	DIN374
	0807525	MF8	0.75	34	6 x 4.9	6	8	80	10	3	7.3	DIN374
	0810025	MF8	1	34	6 x 4.9	6	8	90	10	3	7	DIN374
	1007525	MF10	0.75	38	7 x 5.5	7	10	90	14	3	9.3	DIN374
	1010025	MF10	1	38	7 x 5.5	7	10	90	14	3	9	DIN374
	1012525	MF10	1.25	38	7 x 5.5	7	10	100	14	3	8.8	DIN374
	1210025	MF12	1	48	9 x 7	9	12	100	14	3	11	DIN374
	1212525	MF12	1.25	48	9 x 7	9	12	100	14	3	10.8	DIN374
	1215025	MF12	1.5	48	9 x 7	9	12	100	14	3	10.5	DIN374
	1410025	MF14	1	48	11 x 9	11	14	100	18	3	13	DIN374
	1415025	MF14	1.5	48	11 x 9	11	14	100	18	3	12.5	DIN374
	1610025	MF16	1	52	12 x 9	12	16	100	18	3	15	DIN374
	1615025	MF16	1.5	52	12 x 9	12	16	100	18	3	14.5	DIN374
	1810025	MF18	1	55	14 x 11	14	18	110	18	4	17	DIN374
	1815025	MF18	1.5	55	14 x 11	14	18	110	18	4	16.5	DIN374
	1820025	MF18	2	55	14 x 11	14	18	125	22	4	16	DIN374
	2010025	MF20	1	58	16 x 12	16	20	125	25	4	19	DIN374
	2015025	MF20	1.5	58	16 x 12	16	20	125	25	4	18.5	DIN374
	2215025	MF22	1.5	63	18 x 14.5	18	22	125	25	4	20.5	DIN374
	2415025	MF24	1.5	66	18 x 14.5	18	24	140	25	4	22.5	DIN374
	2420025	MF24	2	66	18 x 14.5	18	24	140	27	4	22	DIN374

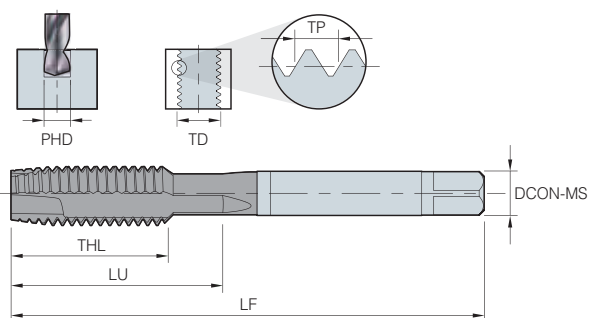
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy		Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~		25~45 HRC	45~55 HRC	50~60 HRC														Ti	Ni		
				SCM				STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	Al	AC ADC	MC	ZDC			-	-

SVDAM

Spiral point Tap



(mm)

Designation	TDZ	TP	LU	CZCMS	DCON-MS	TD	LF	THL	NOF	PHD	BSG
SVDAM											
0204050	M2	0.4	13.5	2.8 x 2.1	2.8	2	45	8	3	1.6	DIN371
022045050	M2.2	0.45	15	2.8 x 2.1	2.8	2	45	9	3	1.8	DIN371
025045050	M2.5	0.45	15	2.8 x 2.1	2.8	3	50	9	3	2.1	DIN371
0305050	M3	0.5	18	3.5 x 2.7	3.5	3	56	11	3	2.5	DIN371
03506050	M3.5	0.6	20	4 x 3	4	4	56	13	3	2.9	DIN371
0407050	M4	0.7	21	4.5 x 3.4	4.5	4	63	13	3	3.3	DIN371
0508050	M5	0.8	25	6 x 4.9	6	5	70	16	3	4.2	DIN371
0610050	M6	1	30	6 x 4.9	6	6	80	19	3	5	DIN371
0812550	M8	1.25	35	8 x 6.2	8	8	90	22	3	6.8	DIN371
1015050	M10	1.5	39	10 x 8	10	10	100	24	3	8.5	DIN371
1217525	M12	1.75	40	9 x 7	9	12	110	29	3	10.2	DIN376
1420050	M14	2	45	11 x 9	11	14	110	30	3	12	DIN376
1620050	M16	2	52	12 x 9	12	16	110	32	3	14	DIN376
1825050	M18	2.5	55	14 x 11	14	18	125	34	3	15.5	DIN376
2025050	M20	2.5	58	16 x 12	16	20	140	34	4	17.5	DIN376
2225050	M22	2.5	63	18 x 14.5	18	22	140	34	4	19.5	DIN376
2430050	M24	3	66	18 x 14.5	18	24	160	38	4	21	DIN376
0405050	MF4	0.5	18	2.8 x 2.1	2.8	4	63	10	3	3.5	DIN374
0505050	MF5	0.5	25	3.5 x 2.7	3.5	5	70	12	3	4.5	DIN374
0507550	MF5	0.75	25	3.5 x 2.7	3.5	5	70	12	3	4.8	DIN374
0605050	MF6	0.5	25	4.5 x 3.4	4.5	6	80	14	3	5.5	DIN374
0607550	MF6	0.75	25	4.5 x 3.4	4.5	6	80	14	3	5.3	DIN374
0805050	MF8	0.5	35	6 x 4.9	6	8	80	19	3	7.5	DIN374
0807550	MF8	0.75	35	6 x 4.9	6	8	80	19	3	7.3	DIN374
0810050	MF8	1	35	6 x 4.9	6	8	90	22	3	7	DIN374
1005050	MF10	0.5	39	7 x 5.5	7	10	90	20	3	9.5	DIN374
1007550	MF10	0.75	39	7 x 5.5	7	10	90	20	3	9.3	DIN374
1010050	MF10	1	39	7 x 5.5	7	10	90	20	3	9	DIN374
1012550	MF10	1.25	39	7 x 5.5	7	10	100	24	3	8.8	DIN374
1207550	MF12	0.75	48	9 x 7	9	12	100	22	3	11.3	DIN374
1210050	MF12	1	48	9 x 7	9	12	100	22	3	11	DIN374
1212550	MF12	1.25	48	9 x 7	9	12	100	22	3	10.8	DIN374
1215050	MF12	1.5	48	9 x 7	9	12	100	22	3	10.5	DIN374
1410050	MF14	1	48	11 x 9	11	14	100	22	3	13	DIN374
1412550	MF14	1.25	48	11 x 9	11	14	100	22	3	12.8	DIN374
1415050	MF14	1.5	48	11 x 9	11	14	100	22	3	12.5	DIN374
1610050	MF16	1	52	12 x 9	12	16	100	22	3	15	DIN374
1612550	MF16	1.25	52	12 x 9	12	16	100	22	3	14.8	DIN374
1615050	MF16	1.5	52	12 x 9	12	16	100	22	3	14.5	DIN374
1810050	MF18	1	55	14 x 11	14	18	110	25	4	17	DIN374
1815050	MF18	1.5	55	14 x 11	14	18	110	25	4	16.5	DIN374
1820050	MF18	2	55	14 x 11	14	18	125	34	4	16	DIN374
2010050	MF20	1	58	16 x 12	16	20	125	25	4	19	DIN374
2015050	MF20	1.5	58	16 x 12	16	20	125	25	4	18.5	DIN374
2020050	MF20	2	58	16 x 12	16	20	140	34	4	18	DIN374
2215050	MF22	1.5	63	18 x 14.5	18	22	125	25	4	20.5	DIN374
2415050	MF24	1.5	66	18 x 14.5	18	24	140	28	4	22.5	DIN374
2420050	MF24	2	66	18 x 14.5	18	24	140	28	4	22	DIN374

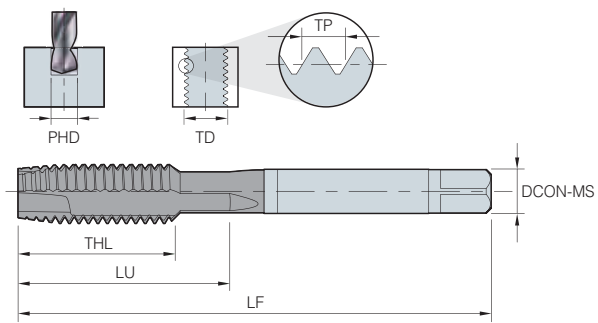
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy		Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	Al	AC ADC	MC	ZDC	Ti	Ni	-	-

SVDNM

Spiral point Tap



(mm)

Designation	TDZ	TP	LU	CZCMS	DCON-MS	TD	LF	THL	NOF	PHD	BSG
SVDNM											
0204050	M2	0.4	13.5	2.8 x 2.1	2.8	2	45	8	3	1.6	DIN371
025045050	M2.5	0.45	15	2.8 x 2.1	2.8	3	50	9	3	2.1	DIN371
0305050	M3	0.5	18	3.5 x 2.7	3.5	3	56	11	3	2.5	DIN371
0407050	M4	0.7	21	4.5 x 3.4	4.5	4	63	13	3	3.3	DIN371
0508050	M5	0.8	25	6 x 4.9	6	5	70	16	3	4.2	DIN371
0610050	M6	1	30	6 x 4.9	6	6	80	19	3	5	DIN371
0812550	M8	1.25	35	8 x 6.2	8	8	90	22	3	6.8	DIN371
1015050	M10	1.5	39	10 x 8	10	10	100	24	3	8.5	DIN371
1217525	M12	1.75	40	9 x 7	9	12	110	29	3	10.2	DIN376
1420050	M14	2	45	11 x 9	11	14	110	30	3	12	DIN376
1620050	M16	2	52	12 x 9	12	16	110	32	3	14	DIN376
1825050	M18	2.5	55	14 x 11	14	18	125	34	3	15.5	DIN376
2025050	M20	2.5	58	16 x 12	16	20	140	34	4	17.5	DIN376
2225050	M22	2.5	63	18 x 14.5	18	22	140	34	4	19.5	DIN376
2430050	M24	3	66	18 x 14.5	18	24	160	38	4	21	DIN376
0405050	MF4	0.5	18	2.8 x 2.1	2.8	4	63	10	3	3.5	DIN374
0505050	MF5	0.5	25	3.5 x 2.7	3.5	5	70	12	3	4.5	DIN374
0607550	MF6	0.75	25	4.5 x 3.4	4.5	6	80	14	3	5.3	DIN374
0807550	MF8	0.75	35	6 x 4.9	6	8	80	19	3	7.3	DIN374
0810050	MF8	1	35	6 x 4.9	6	8	90	22	3	7	DIN374
1007550	MF10	0.75	39	7 x 5.5	7	10	90	20	3	9.3	DIN374
1010050	MF10	1	39	7 x 5.5	7	10	90	20	3	9	DIN374
1012550	MF10	1.25	39	7 x 5.5	7	10	100	24	3	8.8	DIN374
1210050	MF12	1	48	9 x 7	9	12	100	22	3	11	DIN374
1212550	MF12	1.25	48	9 x 7	9	12	100	22	3	10.8	DIN374
1215050	MF12	1.5	48	9 x 7	9	12	100	22	3	10.5	DIN374
1410050	MF14	1	48	11 x 9	11	14	100	22	3	13	DIN374
1415050	MF14	1.5	48	11 x 9	11	14	100	22	3	12.5	DIN374
1610050	MF16	1	52	12 x 9	12	16	100	22	3	15	DIN374
1615050	MF16	1.5	52	12 x 9	12	16	100	22	3	14.5	DIN374
1810050	MF18	1	55	14 x 11	14	18	110	25	4	17	DIN374
1815050	MF18	1.5	55	14 x 11	14	18	110	25	4	16.5	DIN374
1820050	MF18	2	55	14 x 11	14	18	125	34	4	16	DIN374
2010050	MF20	1	58	16 x 12	16	20	125	25	4	19	DIN374
2015050	MF20	1.5	58	16 x 12	16	20	125	25	4	18.5	DIN374
2215050	MF22	1.5	63	18 x 14.5	18	22	125	25	4	20.5	DIN374
2415050	MF24	1.5	66	18 x 14.5	18	24	140	28	4	22.5	DIN374
2420050	MF24	2	66	18 x 14.5	18	24	140	28	4	22	DIN374

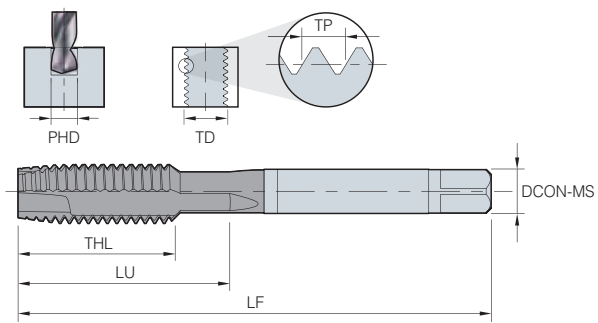
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy		Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	Al	AC ADC	MC	ZDC	Ti	Ni	-	-

SVDOM

Spiral point Tap



(mm)

Designation		TDZ	TP	LU	CZCMS	DCON-MS	TD	LF	THL	NOF	PHD	BSG
SVDOM	0204050	M2	0.4	13.5	2.8 x 2.1	2.8	2	45	8	3	1.6	DIN371
	025045050	M2.5	0.45	15	2.8 x 2.1	2.8	3	50	9	3	2.1	DIN371
	0305050	M3	0.5	18	3.5 x 2.7	3.5	3	56	11	3	2.5	DIN371
	0407050	M4	0.7	21	4.5 x 3.4	4.5	4	63	13	3	3.3	DIN371
	0508050	M5	0.8	25	6 x 4.9	6	5	70	16	3	4.2	DIN371
	0610050	M6	1	30	6 x 4.9	6	6	80	19	3	5	DIN371
	0812550	M8	1.25	35	8 x 6.2	8	8	90	22	3	6.8	DIN371
	1015050	M10	1.5	39	10 x 8	10	10	100	24	3	8.5	DIN371
	1217525	M12	1.75	40	9 x 7	9	12	110	29	3	10.2	DIN376
	1420050	M14	2	45	11 x 9	11	14	110	30	3	12	DIN376
	1620050	M16	2	52	12 x 9	12	16	110	32	3	14	DIN376
	1825050	M18	2.5	55	14 x 11	14	18	125	34	3	15.5	DIN376
	2025050	M20	2.5	58	16 x 12	16	20	140	34	4	17.5	DIN376
	2225050	M22	2.5	63	18 x 14.5	18	22	140	34	4	19.5	DIN376
	2430050	M24	3	66	18 x 14.5	18	24	160	38	4	21	DIN376
	0405050	MF4	0.5	18	2.8 x 2.1	2.8	4	63	10	3	3.5	DIN374
	0505050	MF5	0.5	25	3.5 x 2.7	3.5	5	70	12	3	4.5	DIN374
	0607550	MF6	0.75	25	4.5 x 3.4	4.5	6	80	14	3	5.3	DIN374
	0807550	MF8	0.75	35	6 x 4.9	6	8	80	19	3	7.3	DIN374
	0810050	MF8	1	35	6 x 4.9	6	8	90	22	3	7	DIN374
	1007550	MF10	0.75	39	7 x 5.5	7	10	90	20	3	9.3	DIN374
	1010050	MF10	1	39	7 x 5.5	7	10	90	20	3	9	DIN374
	1012550	MF10	1.25	39	7 x 5.5	7	10	100	24	3	8.8	DIN374
	1210050	MF12	1	48	9 x 7	9	12	100	22	3	11	DIN374
	1212550	MF12	1.25	48	9 x 7	9	12	100	22	3	10.8	DIN374
	1215050	MF12	1.5	48	9 x 7	9	12	100	22	3	10.5	DIN374
	1410050	MF14	1	48	11 x 9	11	14	100	22	3	13	DIN374
	1415050	MF14	1.5	48	11 x 9	11	14	100	22	3	12.5	DIN374
	1610050	MF16	1	52	12 x 9	12	16	100	22	3	15	DIN374
	1615050	MF16	1.5	52	12 x 9	12	16	100	22	3	14.5	DIN374
	1810050	MF18	1	55	14 x 11	14	18	110	25	4	17	DIN374
	1815050	MF18	1.5	55	14 x 11	14	18	110	25	4	16.5	DIN374
	1820050	MF18	2	55	14 x 11	14	18	125	34	4	16	DIN374
	2010050	MF20	1	58	16 x 12	16	20	125	25	4	19	DIN374
	2015050	MF20	1.5	58	16 x 12	16	20	125	25	4	18.5	DIN374
	2215050	MF22	1.5	63	18 x 14.5	18	22	125	25	4	20.5	DIN374
	2415050	MF24	1.5	66	18 x 14.5	18	24	140	28	4	22.5	DIN374
	2420050	MF24	2	66	18 x 14.5	18	24	140	28	4	22	DIN374

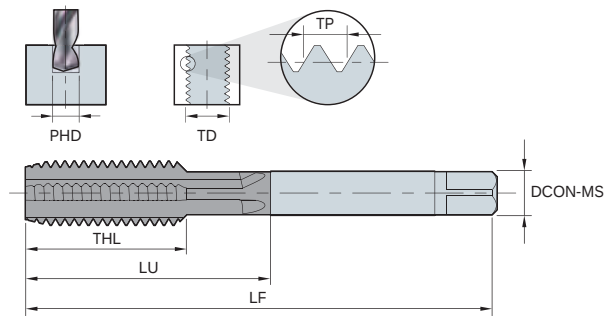
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy		Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	Al	AC ADC	MC	ZDC	Ti	Ni	-	-

SVGAM

Straight flute Tap



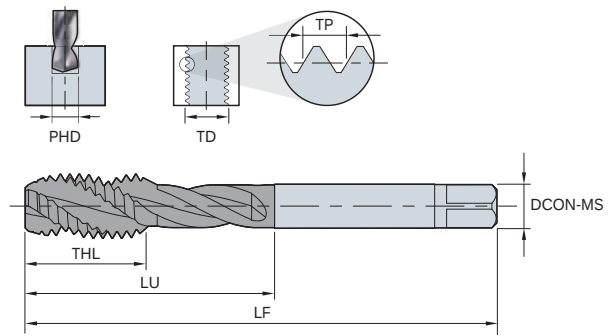
(mm)

Designation	TDZ	TP	LU	CZCMS	DCON-MS	TD	LF	THL	NOF	PHD	BSG	THCHT
SVGAM												
0305015	M3	0.5	18	3.5 x 2.7	3.5	3	56	11	3	2.5	DIN371	E
0407015	M4	0.7	21	4.5 x 3.4	4.5	4	63	13	3	3.3	DIN371	E
0508015	M5	0.8	25	6 x 4.9	6	5	70	15	3	4.2	DIN371	E
0610015	M6	1	30	6 x 4.9	6	6	80	17	4	5	DIN371	E
0812515	M8	1.25	35	8 x 6.2	8	8	90	20	4	6.8	DIN371	E
1015015	M10	1.5	39	10 x 8	10	10	100	22	4	8.5	DIN371	E
1217015	M12	1.75	40	9 x 7	9	12	110	24	4	10.2	DIN376	E
1420015	M14	2	45	11 x 9	11	14	110	26	4	12	DIN376	E
1620015	M16	2	52	12 x 9	12	16	110	27	4	14	DIN376	E
1825015	M18	2.5	55	14 x 11	14	18	125	30	4	15.5	DIN376	E
2025015	M20	2.5	58	16 x 12	16	20	140	32	4	17.5	DIN376	E
2225015	M22	2.5	63	18 x 14.5	18	22	140	32	4	19.5	DIN376	E
2430015	M24	3	66	18 x 14.5	18	24	160	34	4	21	DIN376	E
0810015	MF8	1	35	6 x 4.9	6	8	90	17	4	7	DIN374	E
1010015	MF10	1	39	7 x 5.5	7	10	90	18	4	9	DIN374	E
1012515	MF10	1.25	39	7 x 5.5	7	10	100	22	4	8.8	DIN374	E
1210015	MF12	1	48	9 x 7	9	12	100	18	4	11	DIN374	E
1212515	MF12	1.25	48	9 x 7	9	12	100	22	4	10.8	DIN374	E
1215015	MF12	1.5	48	9 x 7	9	12	100	22	4	10.5	DIN374	E
1415015	MF14	1.5	48	11 x 9	11	14	100	22	4	12.5	DIN374	E
1615015	MF16	1.5	52	12 x 9	12	16	100	22	4	14.5	DIN374	E
1815015	MF18	1.5	55	14 x 11	14	18	110	25	4	16.5	DIN374	E
2015015	MF20	1.5	58	16 x 12	16	20	125	25	4	18.5	DIN374	E
2215015	MF22	1.5	63	18 x 14.5	18	22	125	25	4	20.5	DIN374	E
2415015	MF24	1.5	66	18 x 14.5	18	24	140	27	4	22.5	DIN374	E
2420015	MF24	2	66	18 x 14.5	18	24	140	27	4	22	DIN374	E
0305050	M3	0.5	18	3.5 x 2.7	3.5	3	56	11	3	2.5	DIN371	B
0407050	M4	0.7	21	4.5 x 3.4	4.5	4	63	13	3	3.3	DIN371	B
0508050	M5	0.8	25	6 x 4.9	6	5	70	15	3	4.2	DIN371	B
0610050	M6	1	30	6 x 4.9	6	6	80	17	4	5	DIN371	B
0812550	M8	1.25	35	8 x 6.2	8	8	90	20	4	6.8	DIN371	B
1015050	M10	1.5	39	10 x 8	10	10	100	22	4	8.5	DIN371	B
1217050	M12	1.75	40	9 x 7	9	12	110	24	4	10.2	DIN376	B
1420050	M14	2	45	11 x 9	11	14	110	26	4	12	DIN376	B
1620050	M16	2	52	12 x 9	12	16	110	27	4	14	DIN376	B
1825050	M18	2.5	55	14 x 11	14	18	125	30	4	15.5	DIN376	B
2025050	M20	2.5	58	16 x 12	16	20	140	32	4	17.5	DIN376	B
2225050	M22	2.5	63	18 x 14.5	18	22	140	32	4	19.5	DIN376	B
2430050	M24	3	66	18 x 14.5	18	24	160	34	4	21	DIN376	B
0810050	MF8	1	35	6 x 4.9	6	8	90	17	4	7	DIN374	B
1010050	MF10	1	39	7 x 5.5	7	10	90	18	4	9	DIN374	B
1012550	MF10	1.25	39	7 x 5.5	7	10	100	22	4	8.8	DIN374	B
1210050	MF12	1	48	9 x 7	9	12	100	18	4	11	DIN374	B
1212550	MF12	1.25	48	9 x 7	9	12	100	22	4	10.8	DIN374	B
1215050	MF12	1.5	48	9 x 7	9	12	100	22	4	10.5	DIN374	B
1415050	MF14	1.5	48	11 x 9	11	14	100	22	4	12.5	DIN374	B
1615050	MF16	1.5	52	12 x 9	12	16	100	22	4	14.5	DIN374	B
1815050	MF18	1.5	55	14 x 11	14	18	110	25	4	16.5	DIN374	B
2015050	MF20	1.5	58	16 x 12	16	20	125	25	4	18.5	DIN374	B
2215050	MF22	1.5	63	18 x 14.5	18	22	125	25	4	20.5	DIN374	B
2415050	MF24	1.5	66	18 x 14.5	18	24	140	27	4	22.5	DIN374	B
2420050	MF24	2	66	18 x 14.5	18	24	140	27	4	22	DIN374	B

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy		Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	Al	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation	TDZ	TP	LU	CZCMS	DCON-MS	TD	LF	THL	NOF	PHD	BSG	TCTR
SVPAM												
0204025	M2	0.4	13.5	3 x 2.5	3	2	40	8	3	1.6	JIS	H2
025045025	M2.5	0.45	14.5	3 x 2.5	3	3	44	9	3	2.1	JIS	H2
0305025	M3	0.5	17	4 x 3.2	4	3	46	6	3	2.5	JIS	H2
0407025	M4	0.7	20.5	5 x 4	5	4	52	7.5	3	3.3	JIS	H2
04507525	M4.5	0.75	20.5	5 x 4	5	5	55	13	3	3.8	JIS	H2
0508025	M5	0.8	25	5.5 x 4.5	5.5	5	60	9	3	4.2	JIS	H2
0610025	M6	1	29	6 x 4.5	6	6	62	11	3	5	JIS	H2
0812525	M8	1.25	34	6.2 x 5	6.2	8	70	13	3	6.8	JIS	H3
1015025	M10	1.5	38	7 x 5.5	7	10	75	16	3	8.5	JIS	H3
1217525	M12	1.75	48	8.5 x 6.5	8.5	12	82	18	3	10.2	JIS	H4
1420025	M14	2	45	10.5 x 8	10.5	14	88	20	4	12	JIS	H4
1620025	M16	2	52	12.5 x 10	12.5	16	95	20	4	14	JIS	H4
1825025	M18	2.5	55	14 x 11	14	18	100	22	4	15.5	JIS	H4
2025025	M20	2.5	58	15 x 12	15	20	105	25	4	17.5	JIS	H4
2225025	M22	2.5	63	17 x 13	17	22	115	25	4	19.5	JIS	H4
2430025	M24	3	66	19 x 15	19	24	120	29	4	21	JIS	H4
0405025	MF4	0.5	20.5	5 x 4	5	4	52	7.5	3	3.5	JIS	H2
0505025	MF5	0.5	25	5.5 x 4.5	5.5	5	60	8	3	4.5	JIS	H2
0607525	MF6	0.75	29	6 x 4.5	6	6	62	8	3	5.3	JIS	H2
0807525	MF8	0.75	34	6.2 x 5	6.2	8	70	10	3	7.3	JIS	H3
0810025	MF8	1	34	6.2 x 5	6.2	8	70	10	3	7	JIS	H3
1007525	MF10	0.75	38	7 x 5.5	7	10	75	14	3	9.3	JIS	H3
1010025	MF10	1	38	7 x 5.5	7	10	75	14	3	9	JIS	H3
1012525	MF10	1.25	38	7 x 5.5	7	10	75	14	3	8.8	JIS	H3
1210025	MF12	1	48	8.5 x 6.5	8.5	12	82	14	3	11	JIS	H3
1212525	MF12	1.25	48	8.5 x 6.5	8.5	12	82	14	3	10.8	JIS	H3
1215025	MF12	1.5	48	8.5 x 6.5	8.5	12	82	14	3	10.5	JIS	H3
1410025	MF14	1	48	10.5 x 8	10.5	14	88	18	3	13	JIS	H3
1415025	MF14	1.5	48	10.5 x 8	10.5	14	88	18	3	12.5	JIS	H3
1615025	MF16	1.5	52	12.5 x 10	12.5	16	95	32	3	14.5	JIS	H3
1815025	MF18	1.5	55	14 x 11	14	18	100	37	3	16.5	JIS	H4
2015025	MF20	1.5	58	15 x 12	15	20	105	37	3	18.5	JIS	H4
2215025	MF22	1.5	63	17 x 13	17	22	115	38	3	20.5	JIS	H4
2415025	MF24	1.5	66	19 x 15	19	24	120	45	3	22.5	JIS	H4
2420025	MF24	2	68	19 x 15	19	24	120	45	3	22	JIS	H4

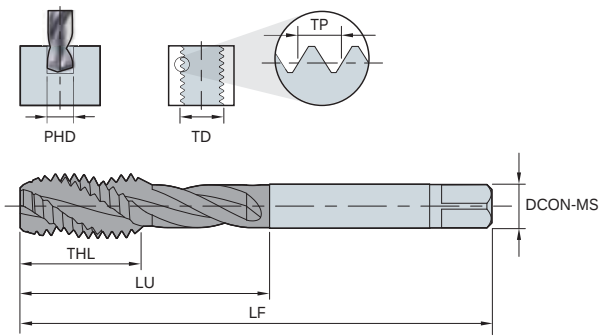
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy		Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	Al	AC ADC	MC	ZDC	Ti	Ni	-	-

SVPNM

Spiral flute Tap



(mm)

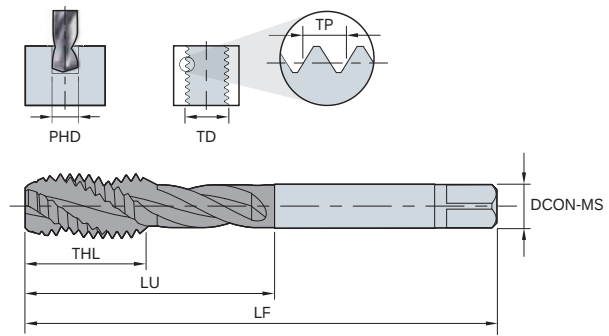
Designation	TDZ	TP	LU	CZCMS	DCON-MS	TD	LF	THL	NOF	PHD	BSG	TCTR
SVPNM												
0204025	M2	0.4	13.5	3 x 2.5	3	2	40	8	3	1.6	JIS	H2
025045025	M2.5	0.45	14.5	3 x 2.5	3	3	44	9	3	2.1	JIS	H2
0305025	M3	0.5	17	4 x 3.2	4	3	46	6	3	2.5	JIS	H2
0407025	M4	0.7	20.5	5 x 4	5	4	52	7.5	3	3.3	JIS	H2
04507525	M4.5	0.75	20.5	5 x 4	5	5	55	13	3	3.8	JIS	H2
0508025	M5	0.8	25	5.5 x 4.5	5.5	5	60	9	3	4.2	JIS	H2
0610025	M6	1	29	6 x 4.5	6	6	62	11	3	5	JIS	H2
0812525	M8	1.25	34	6.2 x 5	6.2	8	70	13	3	6.8	JIS	H3
1015025	M10	1.5	38	7 x 5.5	7	10	75	16	3	8.5	JIS	H3
1217525	M12	1.75	48	8.5 x 6.5	8.5	12	82	18	3	10.2	JIS	H4
1420025	M14	2	45	10.5 x 8	10.5	14	88	20	4	12	JIS	H4
1620025	M16	2	52	12.5 x 10	12.5	16	95	20	4	14	JIS	H4
1825025	M18	2.5	55	14 x 11	14	18	100	22	4	15.5	JIS	H4
2025025	M20	2.5	58	15 x 12	15	20	105	25	4	17.5	JIS	H4
2225025	M22	2.5	63	17 x 13	17	22	115	25	4	19.5	JIS	H4
2430025	M24	3	66	19 x 15	19	24	120	29	4	21	JIS	H4
0405025	MF4	0.5	20.5	5 x 4	5	4	52	7.5	3	3.5	JIS	H2
0505025	MF5	0.5	25	5.5 x 4.5	5.5	5	60	8	3	4.5	JIS	H2
0607525	MF6	0.75	29	6 x 4.5	6	6	62	8	3	5.3	JIS	H2
0807525	MF8	0.75	34	6.2 x 5	6.2	8	70	10	3	7.3	JIS	H3
0810025	MF8	1	34	6.2 x 5	6.2	8	70	10	3	7	JIS	H3
1007525	MF10	0.75	38	7 x 5.5	7	10	75	14	3	9.3	JIS	H3
1010025	MF10	1	38	7 x 5.5	7	10	75	14	3	9	JIS	H3
1012525	MF10	1.25	38	7 x 5.5	7	10	75	14	3	8.8	JIS	H3
1210025	MF12	1	48	8.5 x 6.5	8.5	12	82	14	3	11	JIS	H3
1212525	MF12	1.25	48	8.5 x 6.5	8.5	12	82	14	3	10.8	JIS	H3
1215025	MF12	1.5	48	8.5 x 6.5	8.5	12	82	14	3	10.5	JIS	H3
1410025	MF14	1	48	10.5 x 8	10.5	14	88	18	3	13	JIS	H3
1415025	MF14	1.5	48	10.5 x 8	10.5	14	88	18	3	12.5	JIS	H3
1615025	MF16	1.5	52	12.5 x 10	12.5	16	95	32	3	14.5	JIS	H3
1815025	MF18	1.5	55	14 x 11	14	18	100	37	3	16.5	JIS	H4
2015025	MF20	1.5	58	15 x 12	15	20	105	37	3	18.5	JIS	H4
2215025	MF22	1.5	63	17 x 13	17	22	115	38	3	20.5	JIS	H4
2415025	MF24	1.5	66	19 x 15	19	24	120	45	3	22.5	JIS	H4
2420025	MF24	2	68	19 x 15	19	24	120	45	3	22	JIS	H4

• Applicable workpiece range : Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy		Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	Al	AC ADC	MC	ZDC	Ti	Ni	-	-

SVPOM

Spiral flute Tap



(mm)

Designation	TDZ	TP	LU	CZCMS	DCON-MS	TD	LF	THL	NOF	PHD	BSG	TCTR
SVPOM	0204025	M2	0.4	13.5	3 x 2.5	3	2	40	8	3	1.6	JIS H2
	025045025	M2.5	0.45	14.5	3 x 2.5	3	3	44	9	3	2.1	JIS H2
	0305025	M3	0.5	17	4 x 3.2	4	3	46	6	3	2.5	JIS H2
	0407025	M4	0.7	20.5	5 x 4	5	4	52	7.5	3	3.3	JIS H2
	04507525	M4.5	0.75	20.5	5 x 4	5	5	55	13	3	3.8	JIS H2
	0508025	M5	0.8	25	5.5 x 4.5	5.5	5	60	9	3	4.2	JIS H2
	0610025	M6	1	29	6 x 4.5	6	6	62	11	3	5	JIS H2
	0812525	M8	1.25	34	6.2 x 5	6.2	8	70	13	3	6.8	JIS H3
	1015025	M10	1.5	38	7 x 5.5	7	10	75	16	3	8.5	JIS H3
	1217525	M12	1.75	48	8.5 x 6.5	8.5	12	82	18	3	10.2	JIS H4
	1420025	M14	2	45	10.5 x 8	10.5	14	88	20	4	12	JIS H4
	1620025	M16	2	52	12.5 x 10	12.5	16	95	20	4	14	JIS H4
	1825025	M18	2.5	55	14 x 11	14	18	100	22	4	15.5	JIS H4
	2025025	M20	2.5	58	15 x 12	15	20	105	25	4	17.5	JIS H4
	2225025	M22	2.5	63	17 x 13	17	22	115	25	4	19.5	JIS H4
	2430025	M24	3	66	19 x 15	19	24	120	29	4	21	JIS H4
	0405025	MF4	0.5	20.5	5 x 4	5	4	52	7.5	3	3.5	JIS H2
	0505025	MF5	0.5	25	5.5 x 4.5	5.5	5	60	8	3	4.5	JIS H2
	0607525	MF6	0.75	29	6 x 4.5	6	6	62	8	3	5.3	JIS H2
	0807525	MF8	0.75	34	6.2 x 5	6.2	8	70	10	3	7.3	JIS H3
	0810025	MF8	1	34	6.2 x 5	6.2	8	70	10	3	7	JIS H3
	1007525	MF10	0.75	38	7 x 5.5	7	10	75	14	3	9.3	JIS H3
	1010025	MF10	1	38	7 x 5.5	7	10	75	14	3	9	JIS H3
	1012525	MF10	1.25	38	7 x 5.5	7	10	75	14	3	8.8	JIS H3
	1210025	MF12	1	48	8.5 x 6.5	8.5	12	82	14	3	11	JIS H3
	1212525	MF12	1.25	48	8.5 x 6.5	8.5	12	82	14	3	10.8	JIS H3
	1215025	MF12	1.5	48	8.5 x 6.5	8.5	12	82	14	3	10.5	JIS H3
	1410025	MF14	1	48	10.5 x 8	10.5	14	88	18	3	13	JIS H3
	1415025	MF14	1.5	48	10.5 x 8	10.5	14	88	18	3	12.5	JIS H3
	1615025	MF16	1.5	52	12.5 x 10	12.5	16	95	32	3	14.5	JIS H3
	1815025	MF18	1.5	55	14 x 11	14	18	100	37	3	16.5	JIS H4
	2015025	MF20	1.5	58	15 x 12	15	20	105	37	3	18.5	JIS H4
	2215025	MF22	1.5	63	17 x 13	17	22	115	38	3	20.5	JIS H4
	2415025	MF24	1.5	66	19 x 15	19	24	120	45	3	22.5	JIS H4
	2420025	MF24	2	68	19 x 15	19	24	120	45	3	22	JIS H4

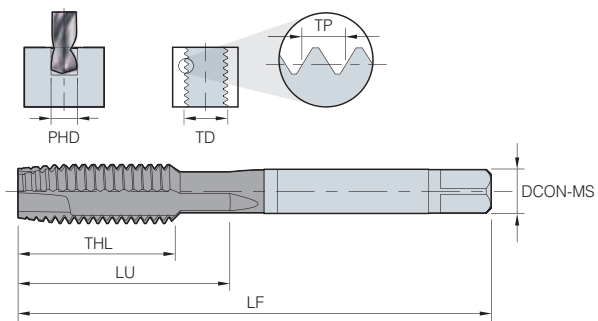
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy		Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	Al	AC ADC	MC	ZDC	Ti	Ni	-	-

SVNAM

Spiral point Tap



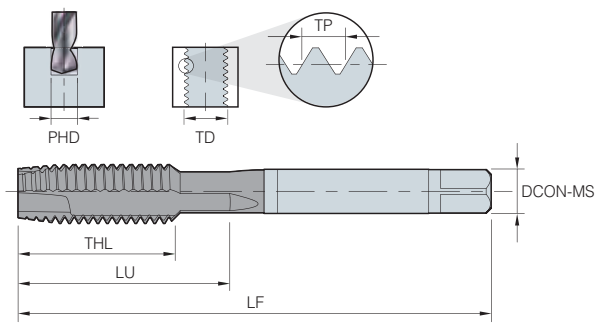
(mm)

Designation	TDZ	TP	LU	CZCMS	DCON-MS	TD	LF	THL	NOF	PHD	BSG	TCTR
SVNAM												
0204050	M2	0.4	14	3 x 2.5	3	2	40	8	3	1.6	JIS	H2
025045050	M2.5	0.45	15	3 x 2.5	3	3	44	9	3	2.1	JIS	H2
0305050	M3	0.5	18	4 x 3.2	4	3	46	11	3	2.5	JIS	H2
0407050	M4	0.7	21	5 x 4	5	4	52	13	3	3.3	JIS	H2
04507550	M4.5	0.75	21	5 x 4	5	5	55	13	3	3.8	JIS	H2
0508050	M5	0.8	25	5.5 x 4.5	5.5	5	60	16	3	4.2	JIS	H2
0610050	M6	1	30	6 x 4.5	6	6	62	19	3	5	JIS	H2
0812550	M8	1.25	35	6.2 x 5	6.2	8	70	22	3	6.8	JIS	H3
1015050	M10	1.5	39	7 x 5.5	7	10	75	24	3	8.5	JIS	H3
1217525	M12	1.75	48	8.5 x 6.5	8.5	12	82	29	3	10.2	JIS	H4
1420050	M14	2	48	10.5 x 8	10.5	14	88	30	3	12	JIS	H4
1620050	M16	2	52	12.5 x 10	12.5	16	95	32	3	14	JIS	H4
1825050	M18	2.5	55	14 x 11	14	18	100	34	3	15.5	JIS	H4
2025050	M20	2.5	58	15 x 12	15	20	105	34	4	17.5	JIS	H4
2225050	M22	2.5	63	17 x 13	17	22	115	34	4	19.5	JIS	H4
2430050	M24	3	66	19 x 15	19	24	120	38	4	21	JIS	H4
0405050	MF4	0.5	21	5 x 4	5	4	52	10	3	3.5	JIS	H2
0505050	MF5	0.5	25	5.5 x 4.5	5.5	5	60	12	3	4.5	JIS	H2
0607550	MF6	0.75	30	6 x 4.5	6	6	62	14	3	5.3	JIS	H2
0807550	MF8	0.75	35	6.2 x 5	6.2	8	70	19	3	7.3	JIS	H3
0810050	MF8	1	35	6.2 x 5	6.2	8	70	19	3	7	JIS	H3
1007550	MF10	0.75	39	7 x 5.5	7	10	75	20	3	9.3	JIS	H3
1010050	MF10	1	39	7 x 5.5	7	10	75	20	3	9	JIS	H3
1012550	MF10	1.25	39	7 x 5.5	7	10	75	20	3	8.8	JIS	H3
1210050	MF12	1	48	8.5 x 6.5	8.5	12	82	22	3	11	JIS	H3
1212550	MF12	1.25	48	8.5 x 6.5	8.5	12	82	22	3	10.8	JIS	H3
1215050	MF12	1.5	48	8.5 x 6.5	8.5	12	82	22	3	10.5	JIS	H3
1410050	MF14	1	48	10.5 x 8	10.5	14	88	22	3	13	JIS	H3
1415050	MF14	1.5	48	10.5 x 8	10.5	14	88	22	3	12.5	JIS	H3
1615050	MF16	1.5	52	12.5 x 10	12.5	16	95	32	3	14.5	JIS	H3
1815050	MF18	1.5	55	14 x 11	14	18	100	37	3	16.5	JIS	H4
2015050	MF20	1.5	58	15 x 12	15	20	105	37	3	18.5	JIS	H4
2215050	MF22	1.5	63	17 x 13	17	22	115	38	3	20.5	JIS	H4
2415050	MF24	1.5	66	19 x 15	19	24	120	45	3	22.5	JIS	H4
2420050	MF24	2	66	19 x 15	19	24	120	45	3	22	JIS	H4

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy		Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	Al	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation	TDZ	TP	LU	CZCMS	DCON-MS	TD	LF	THL	NOF	PHD	BSG	TCTR
SVNNM												
0204050	M2	0.4	14	3 x 2.5	3	2	40	8	3	1.6	JIS	H2
025045050	M2.5	0.45	15	3 x 2.5	3	3	44	9	3	2.1	JIS	H2
0305050	M3	0.5	18	4 x 3.2	4	3	46	11	3	2.5	JIS	H2
0407050	M4	0.7	21	5 x 4	5	4	52	13	3	3.3	JIS	H2
04507550	M4.5	0.75	21	5 x 4	5	5	55	13	3	3.8	JIS	H2
0508050	M5	0.8	25	5.5 x 4.5	5.5	5	60	16	3	4.2	JIS	H2
0610050	M6	1	30	6 x 4.5	6	6	62	19	3	5	JIS	H2
0812550	M8	1.25	35	6.2 x 5	6.2	8	70	22	3	6.8	JIS	H3
1015050	M10	1.5	39	7 x 5.5	7	10	75	24	3	8.5	JIS	H3
1217525	M12	1.75	48	8.5 x 6.5	8.5	12	82	29	3	10.2	JIS	H4
1420050	M14	2	48	10.5 x 8	10.5	14	88	30	3	12	JIS	H4
1620050	M16	2	52	12.5 x 10	12.5	16	95	32	3	14	JIS	H4
1825050	M18	2.5	55	14 x 11	14	18	100	34	3	15.5	JIS	H4
2025050	M20	2.5	58	15 x 12	15	20	105	34	4	17.5	JIS	H4
2225050	M22	2.5	63	17 x 13	17	22	115	34	4	19.5	JIS	H4
2430050	M24	3	66	19 x 15	19	24	120	38	4	21	JIS	H4
0405050	MF4	0.5	21	5 x 4	5	4	52	10	3	3.5	JIS	H2
0505050	MF5	0.5	25	5.5 x 4.5	5.5	5	60	12	3	4.5	JIS	H2
0607550	MF6	0.75	30	6 x 4.5	6	6	62	14	3	5.3	JIS	H2
0807550	MF8	0.75	35	6.2 x 5	6.2	8	70	19	3	7.3	JIS	H3
0810050	MF8	1	35	6.2 x 5	6.2	8	70	19	3	7	JIS	H3
1007550	MF10	0.75	39	7 x 5.5	7	10	75	20	3	9.3	JIS	H3
1010050	MF10	1	39	7 x 5.5	7	10	75	20	3	9	JIS	H3
1012550	MF10	1.25	39	7 x 5.5	7	10	75	20	3	8.8	JIS	H3
1210050	MF12	1	48	8.5 x 6.5	8.5	12	82	22	3	11	JIS	H3
1212550	MF12	1.25	48	8.5 x 6.5	8.5	12	82	22	3	10.8	JIS	H3
1215050	MF12	1.5	48	8.5 x 6.5	8.5	12	82	22	3	10.5	JIS	H3
1410050	MF14	1	48	10.5 x 8	10.5	14	88	22	3	13	JIS	H3
1415050	MF14	1.5	48	10.5 x 8	10.5	14	88	22	3	12.5	JIS	H3
1615050	MF16	1.5	52	12.5 x 10	12.5	16	95	32	3	14.5	JIS	H3
1815050	MF18	1.5	55	14 x 11	14	18	100	37	3	16.5	JIS	H4
2015050	MF20	1.5	58	15 x 12	15	20	105	37	3	18.5	JIS	H4
2215050	MF22	1.5	63	17 x 13	17	22	115	38	3	20.5	JIS	H4
2415050	MF24	1.5	66	19 x 15	19	24	120	45	3	22.5	JIS	H4
2420050	MF24	2	66	19 x 15	19	24	120	45	3	22	JIS	H4

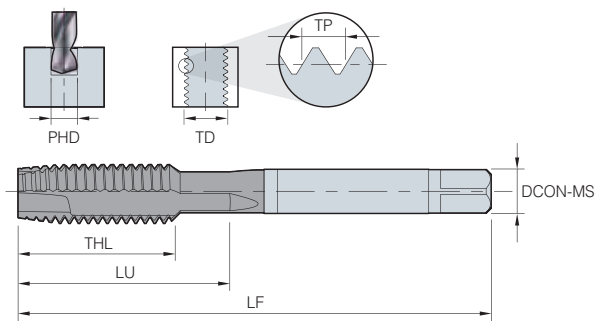
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy		Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	Al	AC ADC	MC	ZDC	Ti	Ni	-	-

SVNOM

Spiral point Tap



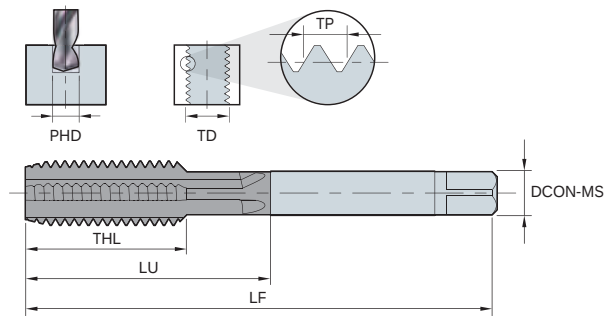
(mm)

Designation	TDZ	TP	LU	CZCMS	DCON-MS	TD	LF	THL	NOF	PHD	BSG	TCTR
SVNOM	0204050	M2	0.4	14	3 x 2.5	3	2	40	8	3	1.6	JIS H2
	025045050	M2.5	0.45	15	3 x 2.5	3	3	44	9	3	2.1	JIS H2
	0305050	M3	0.5	18	4 x 3.2	4	3	46	11	3	2.5	JIS H2
	0407050	M4	0.7	21	5 x 4	5	4	52	13	3	3.3	JIS H2
	04507550	M4.5	0.75	21	5 x 4	5	5	55	13	3	3.8	JIS H2
	0508050	M5	0.8	25	5.5 x 4.5	5.5	5	60	16	3	4.2	JIS H2
	0610050	M6	1	30	6 x 4.5	6	6	62	19	3	5	JIS H2
	0812550	M8	1.25	35	6.2 x 5	6.2	8	70	22	3	6.8	JIS H3
	1015050	M10	1.5	39	7 x 5.5	7	10	75	24	3	8.5	JIS H3
	1217525	M12	1.75	48	8.5 x 6.5	8.5	12	82	29	3	10.2	JIS H4
	1420050	M14	2	48	10.5 x 8	10.5	14	88	30	3	12	JIS H4
	1620050	M16	2	52	12.5 x 10	12.5	16	95	32	3	14	JIS H4
	1825050	M18	2.5	55	14 x 11	14	18	100	34	3	15.5	JIS H4
	2025050	M20	2.5	58	15 x 12	15	20	105	34	4	17.5	JIS H4
	2225050	M22	2.5	63	17 x 13	17	22	115	34	4	19.5	JIS H4
	2430050	M24	3	66	19 x 15	19	24	120	38	4	21	JIS H4
	0405050	MF4	0.5	21	5 x 4	5	4	52	10	3	3.5	JIS H2
	0505050	MF5	0.5	25	5.5 x 4.5	5.5	5	60	12	3	4.5	JIS H2
	0607550	MF6	0.75	30	6 x 4.5	6	6	62	14	3	5.3	JIS H2
	0807550	MF8	0.75	35	6.2 x 5	6.2	8	70	19	3	7.3	JIS H3
	0810050	MF8	1	35	6.2 x 5	6.2	8	70	19	3	7	JIS H3
	1007550	MF10	0.75	39	7 x 5.5	7	10	75	20	3	9.3	JIS H3
	1010050	MF10	1	39	7 x 5.5	7	10	75	20	3	9	JIS H3
	1012550	MF10	1.25	39	7 x 5.5	7	10	75	20	3	8.8	JIS H3
	1210050	MF12	1	48	8.5 x 6.5	8.5	12	82	22	3	11	JIS H3
	1212550	MF12	1.25	48	8.5 x 6.5	8.5	12	82	22	3	10.8	JIS H3
	1215050	MF12	1.5	48	8.5 x 6.5	8.5	12	82	22	3	10.5	JIS H3
	1410050	MF14	1	48	10.5 x 8	10.5	14	88	22	3	13	JIS H3
	1415050	MF14	1.5	48	10.5 x 8	10.5	14	88	22	3	12.5	JIS H3
	1615050	MF16	1.5	52	12.5 x 10	12.5	16	95	32	3	14.5	JIS H3
	1815050	MF18	1.5	55	14 x 11	14	18	100	37	3	16.5	JIS H4
	2015050	MF20	1.5	58	15 x 12	15	20	105	37	3	18.5	JIS H4
	2215050	MF22	1.5	63	17 x 13	17	22	115	38	3	20.5	JIS H4
	2415050	MF24	1.5	66	19 x 15	19	24	120	45	3	22.5	JIS H4
	2420050	MF24	2	66	19 x 15	19	24	120	45	3	22	JIS H4

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy		Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	Al	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation	TDZ	TP	LU	CZCMS	DCON-MS	TD	LF	THL	NOF	PHD	BSG	THCHT	TCTR
SVSAM													
0305015	M3	0.5	18	4 x 3.2	4	3	46	11	3	2.5	JIS	E	H2
0407015	M4	0.7	21	5 x 4	5	4	52	13	3	3.3	JIS	E	H2
04507515	M4.5	0.75	21	5 x 4	5	5	55	13	3	3.8	JIS	E	H2
0508015	M5	0.8	25	5.5 x 4.5	5.5	5	60	16	3	4.2	JIS	E	H2
0610015	M6	1	30	6 x 4.5	6	6	62	19	4	5	JIS	E	H2
0812515	M8	1.25	35	6.2 x 5	6.2	8	70	22	4	6.8	JIS	E	H3
1015015	M10	1.5	39	7 x 5.5	7	10	75	24	4	8.5	JIS	E	H3
1217015	M12	1.75	48	8.5 x 6.5	8.5	12	82	29	4	10.2	JIS	E	H4
1420015	M14	2	48	10.5 x 8	10.5	14	88	30	4	12	JIS	E	H4
1620015	M16	2	52	12.5 x 10	12.5	16	95	32	4	14	JIS	E	H4
1825015	M18	2.5	55	14 x 11	14	18	100	37	4	15.5	JIS	E	H4
2025015	M20	2.5	58	15 x 12	15	20	105	37	4	17.5	JIS	E	H4
2225015	M22	2.5	63	17 x 13	17	22	115	38	4	19.5	JIS	E	H4
2430015	M24	3	66	19 x 15	19	24	120	45	4	21	JIS	E	H4
0810015	MF8	1	35	6.2 x 5	6.2	8	70	22	4	7	JIS	E	H3
1012515	MF10	1.25	39	7 x 5.5	7	10	75	24	4	8.8	JIS	E	H3
1210015	MF12	1	48	8.5 x 6.5	8.5	12	82	29	4	11	JIS	E	H3
1212515	MF12	1.25	48	8.5 x 6.5	8.5	12	82	29	4	10.8	JIS	E	H3
1215015	MF12	1.5	48	8.5 x 6.5	8.5	12	82	29	4	10.5	JIS	E	H3
1415015	MF14	1.5	48	10.5 x 8	10.5	14	88	30	4	12.5	JIS	E	H3
1615015	MF16	1.5	52	12.5 x 10	12.5	16	95	32	4	14.5	JIS	E	H3
1815015	MF18	1.5	55	14 x 11	14	18	100	37	4	16.5	JIS	E	H4
2015015	MF20	1.5	58	15 x 12	15	20	105	37	4	18.5	JIS	E	H4
2215015	MF22	1.5	63	17 x 13	17	22	115	38	4	20.5	JIS	E	H4
2415015	MF24	1.5	66	19 x 15	19	24	120	45	4	22.5	JIS	E	H4
2420015	MF24	2	66	19 x 15	19	24	120	45	4	22	JIS	E	H4
0305050	M3	0.5	18	4 x 3.2	4	3	46	11	3	2.5	JIS	B	H2
0407050	M4	0.7	21	5 x 4	5	4	52	13	3	3.3	JIS	B	H2
04507550	M4.5	0.75	21	5 x 4	5	5	55	13	3	3.8	JIS	B	H2
0508050	M5	0.8	25	5.5 x 4.5	5.5	5	60	16	3	4.2	JIS	B	H2
0610050	M6	1	30	6 x 4.5	6	6	62	19	4	5	JIS	B	H2
0812550	M8	1.25	35	6.2 x 5	6.2	8	70	22	4	6.8	JIS	B	H3
1015050	M10	1.5	39	7 x 5.5	7	10	75	24	4	8.5	JIS	B	H3
1217050	M12	1.75	48	8.5 x 6.5	8.5	12	82	29	4	10.2	JIS	B	H4
1420050	M14	2	48	10.5 x 8	10.5	14	88	30	4	12	JIS	B	H4
1620050	M16	2	52	12.5 x 10	12.5	16	95	32	4	14	JIS	B	H4
1825050	M18	2.5	55	14 x 11	14	18	100	37	4	15.5	JIS	B	H4
2025050	M20	2.5	58	15 x 12	15	20	105	37	4	17.5	JIS	B	H4
2225050	M22	2.5	63	17 x 13	17	22	115	38	4	19.5	JIS	B	H4
2430050	M24	3	66	19 x 15	19	24	120	45	4	21	JIS	B	H4
0810050	MF8	1	35	6.2 x 5	6.2	8	70	22	4	7	JIS	B	H3
1012550	MF10	1.25	39	7 x 5.5	7	10	75	24	4	8.8	JIS	B	H3
1210050	MF12	1	48	8.5 x 6.5	8.5	12	82	29	4	11	JIS	B	H3
1212550	MF12	1.25	48	8.5 x 6.5	8.5	12	82	29	4	10.8	JIS	B	H3
1215050	MF12	1.5	48	8.5 x 6.5	8.5	12	82	29	4	10.5	JIS	B	H3
1415050	MF14	1.5	48	10.5 x 8	10.5	14	88	30	4	12.5	JIS	B	H3
1615050	MF16	1.5	52	12.5 x 10	12.5	16	95	32	4	14.5	JIS	B	H3
1815050	MF18	1.5	55	14 x 11	14	18	100	37	4	16.5	JIS	B	H4
2015050	MF20	1.5	58	15 x 12	15	20	105	37	4	18.5	JIS	B	H4
2215050	MF22	1.5	63	17 x 13	17	22	115	38	4	20.5	JIS	B	H4
2415050	MF24	1.5	66	19 x 15	19	24	120	45	4	22.5	JIS	B	H4
2420050	MF24	2	66	19 x 15	19	24	120	45	4	22	JIS	B	H4

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy		Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	Al	AC ADC	MC	ZDC	Ti	Ni	-	-

VQOM

Spiral flute Tap

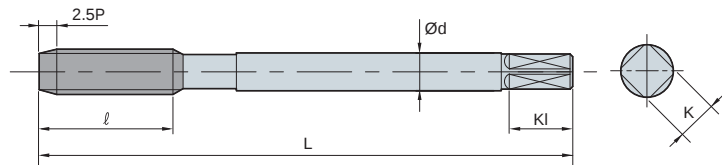
DIN

SFT

Bright

C
form

HSSE



(mm)

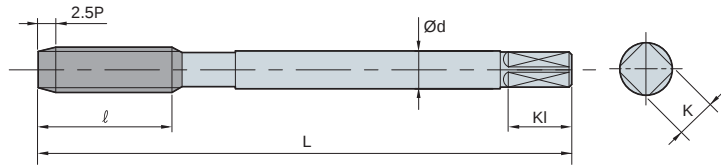
Designation		Thread size	Limits	L	ℓ	d	K	KI	Z	DIN type
VQOM	0305025	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
	0407025	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
	0508025	M5 × 0.8	6H	70	15	6	4.9	8	3	371
	0610025	M6 × 1.0	6H	80	17	6	4.9	8	3	371
	0810025	M8 × 1.0	6H	90	17	6	4.9	8	3	374
	0812525	M8 × 1.25	6H	90	20	8	6.2	9	3	371
	1010025	M10 × 1.0	6H	90	18	7	5.5	8	3	374
	1012525	M10 × 1.25	6H	100	22	7	5.5	8	3	374
	1015025	M10 × 1.5	6H	100	22	10	8	11	3	371
	1210025	M12 × 1.0	6H	100	18	9	7	10	3	374
	1212525	M12 × 1.25	6H	100	22	9	7	10	3	374
	1215025	M12 × 1.5	6H	100	22	9	7	10	3	374
	1217525	M12 × 1.75	6H	110	24	9	7	10	3	376
	1415025	M14 × 1.5	6H	100	22	11	9	12	3	374
	1420025	M14 × 2.0	6H	110	26	11	9	12	3	376
	1615025	M16 × 1.5	6H	100	22	12	9	12	3	374
	1620025	M16 × 2.0	6H	110	27	12	9	12	3	376
	1815025	M18 × 1.5	6H	110	25	14	11	14	4	374
	1825025	M18 × 2.5	6H	125	30	14	11	14	4	376
	2015025	M20 × 1.5	6H	125	25	16	12	15	4	374
	2025025	M20 × 2.5	6H	140	32	16	12	15	4	376
	2215025	M22 × 1.5	6H	125	25	18	14.5	17	4	374
	2225025	M22 × 2.5	6H	140	32	18	14.5	17	4	376
	2415025	M24 × 1.5	6H	140	27	18	14.5	17	4	374
	2420025	M24 × 2.0	6H	140	27	18	14.5	17	4	374
	2430025	M24 × 3.0	6H	160	34	18	14.5	17	4	376

• Applicable workpiece range

: Excellent

: Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25-45 HRC	45-55 HRC	50-60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z	DIN type
VQTM	0305025	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
	0407025	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
	0508025	M5 × 0.8	6H	70	15	6	4.9	8	3	371
	0610025	M6 × 1.0	6H	80	17	6	4.9	8	3	371
	0810025	M8 × 1.0	6H	90	17	6	4.9	8	3	374
	0812525	M8 × 1.25	6H	90	20	8	6.2	9	3	371
	1010025	M10 × 1.0	6H	90	18	7	5.5	8	3	374
	1012525	M10 × 1.25	6H	100	22	7	5.5	8	3	374
	1015025	M10 × 1.5	6H	100	22	10	8	11	3	371
	1210025	M12 × 1.0	6H	100	18	9	7	10	3	374
	1212525	M12 × 1.25	6H	100	22	9	7	10	3	374
	1215025	M12 × 1.5	6H	100	22	9	7	10	3	374
	1217525	M12 × 1.75	6H	110	24	9	7	10	3	376
	1415025	M14 × 1.5	6H	100	22	11	9	12	3	374
	1420025	M14 × 2.0	6H	110	26	11	9	12	3	376
	1615025	M16 × 1.5	6H	100	22	12	9	12	3	374
	1620025	M16 × 2.0	6H	110	27	12	9	12	3	376
	1815025	M18 × 1.5	6H	110	25	14	11	14	4	374
	1825025	M18 × 2.5	6H	125	30	14	11	14	4	376
	2015025	M20 × 1.5	6H	125	25	16	12	15	4	374
	2025025	M20 × 2.5	6H	140	32	16	12	15	4	376
	2215025	M22 × 1.5	6H	125	25	18	14.5	17	4	374
	2225025	M22 × 2.5	6H	140	32	18	14.5	17	4	376
	2415025	M24 × 1.5	6H	140	27	18	14.5	17	4	374
	2420025	M24 × 2.0	6H	140	27	18	14.5	17	4	374
	2430025	M24 × 3.0	6H	160	34	18	14.5	17	4	376

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25%~0.45%	C 0.45%~	SCM	25~45 Hrc	45~55 Hrc	50~60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VQCM

Spiral flute Tap

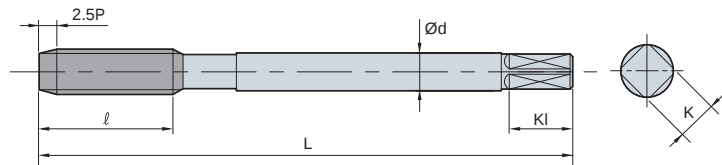
DIN

SFT

TiCN

C
form

HSSE



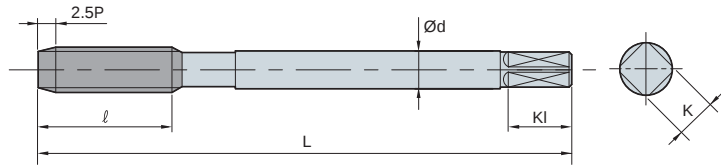
(mm)

Designation		Thread size	Limits	L	ℓ	d	K	Kl	Z	DIN type
VQCM	0305025	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
	0407025	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
	0508025	M5 × 0.8	6H	70	15	6	4.9	8	3	371
	0610025	M6 × 1.0	6H	80	17	6	4.9	8	3	371
	0810025	M8 × 1.0	6H	90	17	6	4.9	8	3	374
	0812525	M8 × 1.25	6H	90	20	8	6.2	9	3	371
	1010025	M10 × 1.0	6H	90	18	7	5.5	8	3	374
	1012525	M10 × 1.25	6H	100	22	7	5.5	8	3	374
	1015025	M10 × 1.5	6H	100	22	10	8	11	3	371
	1210025	M12 × 1.0	6H	100	18	9	7	10	3	374
	1212525	M12 × 1.25	6H	100	22	9	7	10	3	374
	1215025	M12 × 1.5	6H	100	22	9	7	10	3	374
	1217525	M12 × 1.75	6H	110	24	9	7	10	3	376
	1415025	M14 × 1.5	6H	100	22	11	9	12	3	374
	1420025	M14 × 2.0	6H	110	26	11	9	12	3	376
	1615025	M16 × 1.5	6H	100	22	12	9	12	3	374
	1620025	M16 × 2.0	6H	110	27	12	9	12	3	376
	1815025	M18 × 1.5	6H	110	25	14	11	14	4	374
	1825025	M18 × 2.5	6H	125	30	14	11	14	4	376
	2015025	M20 × 1.5	6H	125	25	16	12	15	4	374
	2025025	M20 × 2.5	6H	140	32	16	12	15	4	376
	2215025	M22 × 1.5	6H	125	25	18	14.5	17	4	374
	2225025	M22 × 2.5	6H	140	32	18	14.5	17	4	376
	2415025	M24 × 1.5	6H	140	27	18	14.5	17	4	374
	2420025	M24 × 2.0	6H	140	27	18	14.5	17	4	374
	2430025	M24 × 3.0	6H	160	34	18	14.5	17	4	376

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25-45 HRC	45-55 HRC	50-60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z	DIN type
VQHM	0305025	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
	0407025	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
	0508025	M5 × 0.8	6H	70	15	6	4.9	8	3	371
	0610025	M6 × 1.0	6H	80	17	6	4.9	8	3	371
	0810025	M8 × 1.0	6H	90	17	6	4.9	8	3	374
	0812525	M8 × 1.25	6H	90	20	8	6.2	9	3	371
	1010025	M10 × 1.0	6H	90	18	7	5.5	8	3	374
	1012525	M10 × 1.25	6H	100	22	7	5.5	8	3	374
	1015025	M10 × 1.5	6H	100	22	10	8	11	3	371
	1210025	M12 × 1.0	6H	100	18	9	7	10	3	374
	1212525	M12 × 1.25	6H	100	22	9	7	10	3	374
	1215025	M12 × 1.5	6H	100	22	9	7	10	3	374
	1217525	M12 × 1.75	6H	110	24	9	7	10	3	376
	1415025	M14 × 1.5	6H	100	22	11	9	12	3	374
	1420025	M14 × 2.0	6H	110	26	11	9	12	3	376
	1615025	M16 × 1.5	6H	100	22	12	9	12	3	374
	1620025	M16 × 2.0	6H	110	27	12	9	12	3	376
	1815025	M18 × 1.5	6H	110	25	14	11	14	4	374
	1825025	M18 × 2.5	6H	125	30	14	11	14	4	376
	2015025	M20 × 1.5	6H	125	25	16	12	15	4	374
	2025025	M20 × 2.5	6H	140	32	16	12	15	4	376
	2215025	M22 × 1.5	6H	125	25	18	14.5	17	4	374
	2225025	M22 × 2.5	6H	140	32	18	14.5	17	4	376
	2415025	M24 × 1.5	6H	140	27	18	14.5	17	4	374
	2420025	M24 × 2.0	6H	140	27	18	14.5	17	4	374
	2430025	M24 × 3.0	6H	160	34	18	14.5	17	4	376

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VDOM

Spiral point Tap

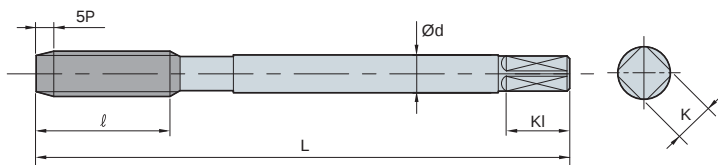
DIN

SPT

Bright

B
form

HSSE



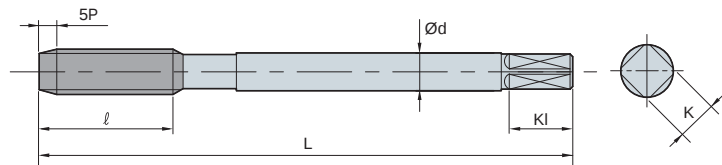
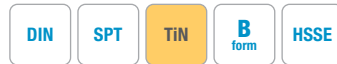
(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z	DIN type
VDOM	0305050	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
	0407050	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
	0508050	M5 × 0.8	6H	70	15	6	4.9	8	3	371
	0610050	M6 × 1.0	6H	80	17	6	4.9	8	3	371
	0810050	M8 × 1.0	6H	90	17	6	4.9	8	3	374
	0812550	M8 × 1.25	6H	90	20	8	6.2	9	3	371
	1010050	M10 × 1.0	6H	90	18	7	5.5	8	3	374
	1012550	M10 × 1.25	6H	100	22	7	5.5	8	3	374
	1015050	M10 × 1.5	6H	100	22	10	8	11	3	371
	1210050	M12 × 1.0	6H	100	18	9	7	10	3	374
	1212550	M12 × 1.25	6H	100	22	9	7	10	3	374
	1215050	M12 × 1.5	6H	100	22	9	7	10	3	374
	1217550	M12 × 1.75	6H	110	24	9	7	10	3	376
	1415050	M14 × 1.5	6H	100	22	11	9	12	3	374
	1420050	M14 × 2.0	6H	110	26	11	9	12	3	376
	1615050	M16 × 1.5	6H	100	22	12	9	12	3	374
	1620050	M16 × 2.0	6H	110	27	12	9	12	3	376
	1815050	M18 × 1.5	6H	110	25	14	11	14	3	374
	1825050	M18 × 2.5	6H	125	30	14	11	14	3	376
	2015050	M20 × 1.5	6H	125	25	16	12	15	3	374
	2025050	M20 × 2.5	6H	140	32	16	12	15	3	376
	2215050	M22 × 1.5	6H	125	25	18	14.5	17	3	374
	2225050	M22 × 2.5	6H	140	32	18	14.5	17	3	376
	2415050	M24 × 1.5	6H	140	27	18	14.5	17	3	374
	2420050	M24 × 2.0	6H	140	27	18	14.5	17	3	374
	2430050	M24 × 3.0	6H	160	34	18	14.5	17	3	376

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z	DIN type
VDTM	0305050	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
	0407050	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
	0508050	M5 × 0.8	6H	70	15	6	4.9	8	3	371
	0610050	M6 × 1.0	6H	80	17	6	4.9	8	3	371
	0810050	M8 × 1.0	6H	90	17	6	4.9	8	3	374
	0812550	M8 × 1.25	6H	90	20	8	6.2	9	3	371
	1010050	M10 × 1.0	6H	90	18	7	5.5	8	3	374
	1012550	M10 × 1.25	6H	100	22	7	5.5	8	3	374
	1015050	M10 × 1.5	6H	100	22	10	8	11	3	371
	1210050	M12 × 1.0	6H	100	18	9	7	10	3	374
	1212550	M12 × 1.25	6H	100	22	9	7	10	3	374
	1215050	M12 × 1.5	6H	100	22	9	7	10	3	374
	1217550	M12 × 1.75	6H	110	24	9	7	10	3	376
	1415050	M14 × 1.5	6H	100	22	11	9	12	3	374
	1420050	M14 × 2.0	6H	110	26	11	9	12	3	376
	1615050	M16 × 1.5	6H	100	22	12	9	12	3	374
	1620050	M16 × 2.0	6H	110	27	12	9	12	3	376
	1815050	M18 × 1.5	6H	110	25	14	11	14	3	374
	1825050	M18 × 2.5	6H	125	30	14	11	14	3	376
	2015050	M20 × 1.5	6H	125	25	16	12	15	3	374
	2025050	M20 × 2.5	6H	140	32	16	12	15	3	376
	2215050	M22 × 1.5	6H	125	25	18	14.5	17	3	374
	2225050	M22 × 2.5	6H	140	32	18	14.5	17	3	376
	2415050	M24 × 1.5	6H	140	27	18	14.5	17	3	374
	2420050	M24 × 2.0	6H	140	27	18	14.5	17	3	374
	2430050	M24 × 3.0	6H	160	34	18	14.5	17	3	376

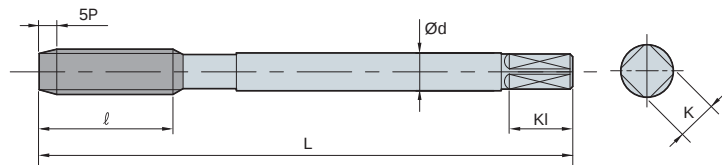
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25% ~0.45%	C 0.45%~	SCM	25~45 Hrc	45~55 Hrc	50~60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VDCM

Spiral point Tap



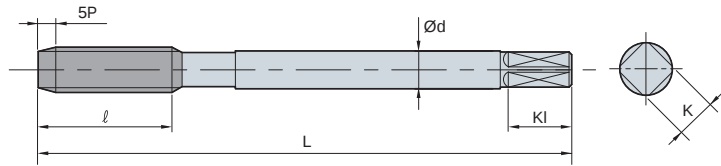
(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z	DIN type
VDCM	0305050	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
	0407050	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
	0508050	M5 × 0.8	6H	70	15	6	4.9	8	3	371
	0610050	M6 × 1.0	6H	80	17	6	4.9	8	3	371
	0810050	M8 × 1.0	6H	90	17	6	4.9	8	3	374
	0812550	M8 × 1.25	6H	90	20	8	6.2	9	3	371
	1010050	M10 × 1.0	6H	90	18	7	5.5	8	3	374
	1012550	M10 × 1.25	6H	100	22	7	5.5	8	3	374
	1015050	M10 × 1.5	6H	100	22	10	8	11	3	371
	1210050	M12 × 1.0	6H	100	18	9	7	10	3	374
	1212550	M12 × 1.25	6H	100	22	9	7	10	3	374
	1215050	M12 × 1.5	6H	100	22	9	7	10	3	374
	1217550	M12 × 1.75	6H	110	24	9	7	10	3	376
	1415050	M14 × 1.5	6H	100	22	11	9	12	3	374
	1420050	M14 × 2.0	6H	110	26	11	9	12	3	376
	1615050	M16 × 1.5	6H	100	22	12	9	12	3	374
	1620050	M16 × 2.0	6H	110	27	12	9	12	3	376
	1815050	M18 × 1.5	6H	110	25	14	11	14	3	374
	1825050	M18 × 2.5	6H	125	30	14	11	14	3	376
	2015050	M20 × 1.5	6H	125	25	16	12	15	3	374
	2025050	M20 × 2.5	6H	140	32	16	12	15	3	376
	2215050	M22 × 1.5	6H	125	25	18	14.5	17	3	374
	2225050	M22 × 2.5	6H	140	32	18	14.5	17	3	376
	2415050	M24 × 1.5	6H	140	27	18	14.5	17	3	374
	2420050	M24 × 2.0	6H	140	27	18	14.5	17	3	374
	2430050	M24 × 3.0	6H	160	34	18	14.5	17	3	376

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25%~0.45%	C 0.45%~	SCM	25~45 Hrc	45~55 Hrc	50~60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z	DIN type
VDHM	0305050	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
	0407050	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
	0508050	M5 × 0.8	6H	70	15	6	4.9	8	3	371
	0610050	M6 × 1.0	6H	80	17	6	4.9	8	3	371
	0810050	M8 × 1.0	6H	90	17	6	4.9	8	3	374
	0812550	M8 × 1.25	6H	90	20	8	6.2	9	3	371
	1010050	M10 × 1.0	6H	90	18	7	5.5	8	3	374
	1012550	M10 × 1.25	6H	100	22	7	5.5	8	3	374
	1015050	M10 × 1.5	6H	100	22	10	8	11	3	371
	1210050	M12 × 1.0	6H	100	18	9	7	10	3	374
	1212550	M12 × 1.25	6H	100	22	9	7	10	3	374
	1215050	M12 × 1.5	6H	100	22	9	7	10	3	374
	1217550	M12 × 1.75	6H	110	24	9	7	10	3	376
	1415050	M14 × 1.5	6H	100	22	11	9	12	3	374
	1420050	M14 × 2.0	6H	110	26	11	9	12	3	376
	1615050	M16 × 1.5	6H	100	22	12	9	12	3	374
	1620050	M16 × 2.0	6H	110	27	12	9	12	3	376
	1815050	M18 × 1.5	6H	110	25	14	11	14	3	374
	1825050	M18 × 2.5	6H	125	30	14	11	14	3	376
	2015050	M20 × 1.5	6H	125	25	16	12	15	3	374
	2025050	M20 × 2.5	6H	140	32	16	12	15	3	376
	2215050	M22 × 1.5	6H	125	25	18	14.5	17	3	374
	2225050	M22 × 2.5	6H	140	32	18	14.5	17	3	376
	2415050	M24 × 1.5	6H	140	27	18	14.5	17	3	374
	2420050	M24 × 2.0	6H	140	27	18	14.5	17	3	374
	2430050	M24 × 3.0	6H	160	34	18	14.5	17	3	376

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25%~0.45%	C 0.45%~	SCM	25~45 Hrc	45~55 Hrc	50~60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VGOM

Straight flute Tap

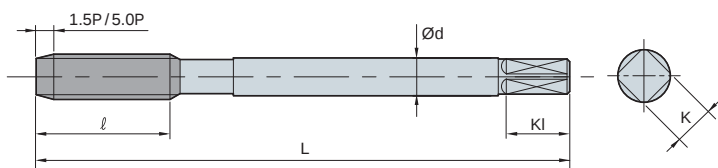
DIN

STT

Bright

E/B
form

HSSE



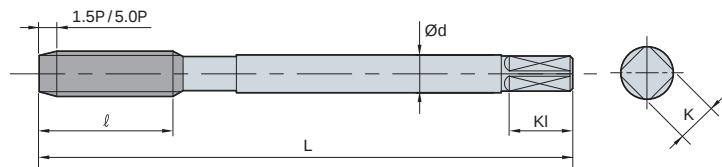
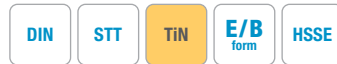
(mm)

Designation		Thread size	Limits	L	ℓ	d	K	Kl	Z	DIN type
VGOM	0305015	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
	0407015	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
	0508015	M5 × 0.8	6H	70	15	6	4.9	8	3	371
	0610015	M6 × 1.0	6H	80	17	6	4.9	8	3	371
	0810015	M8 × 1.0	6H	90	17	6	4.9	8	4	374
	0812515	M8 × 1.25	6H	90	20	8	6.2	9	4	371
	1010015	M10 × 1.0	6H	90	18	7	5.5	8	4	374
	1012515	M10 × 1.25	6H	100	22	7	5.5	8	4	374
	1015015	M10 × 1.5	6H	100	22	10	8	11	4	371
	1210015	M12 × 1.0	6H	100	18	9	7	10	4	374
	1212515	M12 × 1.25	6H	100	22	9	7	10	4	374
	1215015	M12 × 1.5	6H	100	22	9	7	10	4	374
	1217515	M12 × 1.75	6H	110	24	9	7	10	4	376
	1415015	M14 × 1.5	6H	100	22	11	9	12	4	374
	1420015	M14 × 2.0	6H	110	26	11	9	12	4	376
	1615015	M16 × 1.5	6H	100	22	12	9	12	4	374
	1620015	M16 × 2.0	6H	110	27	12	9	12	4	376
	1815015	M18 × 1.5	6H	110	25	14	11	14	4	374
	1825015	M18 × 2.5	6H	125	30	14	11	14	4	376
	2015015	M20 × 1.5	6H	125	25	16	12	15	4	374
	2025015	M20 × 2.5	6H	140	32	16	12	15	4	376
	2215015	M22 × 1.5	6H	125	25	18	14.5	17	4	374
	2225015	M22 × 2.5	6H	140	32	18	14.5	17	4	376
	2415015	M24 × 1.5	6H	140	27	18	14.5	17	4	374
	2420015	M24 × 2.0	6H	140	27	18	14.5	17	4	374
	2430015	M24 × 3.0	6H	160	34	18	14.5	17	4	376
0305050	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371	
0407050	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371	
0508050	M5 × 0.8	6H	70	15	6	4.9	8	3	371	
0610050	M6 × 1.0	6H	80	17	6	4.9	8	3	371	
0810050	M8 × 1.0	6H	90	17	6	4.9	8	4	374	
0812550	M8 × 1.25	6H	90	20	8	6.2	9	4	371	
1010050	M10 × 1.0	6H	90	18	7	5.5	8	4	374	
1012550	M10 × 1.25	6H	100	22	7	5.5	8	4	374	
1015050	M10 × 1.5	6H	100	22	10	8	11	4	371	
1210050	M12 × 1.0	6H	100	18	9	7	10	4	374	
1212550	M12 × 1.25	6H	100	22	9	7	10	4	374	
1215050	M12 × 1.5	6H	100	22	9	7	10	4	374	
1217550	M12 × 1.75	6H	110	24	9	7	10	4	376	
1415050	M14 × 1.5	6H	100	22	11	9	12	4	374	
1420050	M14 × 2.0	6H	110	26	11	9	12	4	376	
1615050	M16 × 1.5	6H	100	22	12	9	12	4	374	
1620050	M16 × 2.0	6H	110	27	12	9	12	4	376	
1815050	M18 × 1.5	6H	110	25	14	11	14	4	374	
1825050	M18 × 2.5	6H	125	30	14	11	14	4	376	
2015050	M20 × 1.5	6H	125	25	16	12	15	4	374	
2025050	M20 × 2.5	6H	140	32	16	12	15	4	376	
2215050	M22 × 1.5	6H	125	25	18	14.5	17	4	374	
2225050	M22 × 2.5	6H	140	32	18	14.5	17	4	376	
2415050	M24 × 1.5	6H	140	27	18	14.5	17	4	374	
2420050	M24 × 2.0	6H	140	27	18	14.5	17	4	374	
2430050	M24 × 3.0	6H	160	34	18	14.5	17	4	376	

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 Hrc	45~55 Hrc	50~60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z	DIN type	
VGTM	0305015	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371	
	0407015	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371	
	0508015	M5 × 0.8	6H	70	15	6	4.9	8	3	371	
	0610015	M6 × 1.0	6H	80	17	6	4.9	8	3	371	
	0810015	M8 × 1.0	6H	90	17	6	4.9	8	4	374	
	0812515	M8 × 1.25	6H	90	20	8	6.2	9	4	371	
	1010015	M10 × 1.0	6H	90	18	7	5.5	8	4	374	
	1012515	M10 × 1.25	6H	100	22	7	5.5	8	4	374	
	1015015	M10 × 1.5	6H	100	22	10	8	11	4	371	
	1210015	M12 × 1.0	6H	100	18	9	7	10	4	374	
	1212515	M12 × 1.25	6H	100	22	9	7	10	4	374	
	1215015	M12 × 1.5	6H	100	22	9	7	10	4	374	
	1217515	M12 × 1.75	6H	110	24	9	7	10	4	376	
	1415015	M14 × 1.5	6H	100	22	11	9	12	4	374	
	1420015	M14 × 2.0	6H	110	26	11	9	12	4	376	
	1615015	M16 × 1.5	6H	100	22	12	9	12	4	374	
	1620015	M16 × 2.0	6H	110	27	12	9	12	4	376	
	1815015	M18 × 1.5	6H	110	25	14	11	14	4	374	
	1825015	M18 × 2.5	6H	125	30	14	11	14	4	376	
	2015015	M20 × 1.5	6H	125	25	16	12	15	4	374	
	2025015	M20 × 2.5	6H	140	32	16	12	15	4	376	
	2215015	M22 × 1.5	6H	125	25	18	14.5	17	4	374	
	2225015	M22 × 2.5	6H	140	32	18	14.5	17	4	376	
	2415015	M24 × 1.5	6H	140	27	18	14.5	17	4	374	
	2420015	M24 × 2.0	6H	140	27	18	14.5	17	4	374	
	2430015	M24 × 3.0	6H	160	34	18	14.5	17	4	376	
		0305050	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
		0407050	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
		0508050	M5 × 0.8	6H	70	15	6	4.9	8	3	371
		0610050	M6 × 1.0	6H	80	17	6	4.9	8	3	371
		0810050	M8 × 1.0	6H	90	17	6	4.9	8	4	374
		0812550	M8 × 1.25	6H	90	20	8	6.2	9	4	371
		1010050	M10 × 1.0	6H	90	18	7	5.5	8	4	374
		1012550	M10 × 1.25	6H	100	22	7	5.5	8	4	374
		1015050	M10 × 1.5	6H	100	22	10	8	11	4	371
		1210050	M12 × 1.0	6H	100	18	9	7	10	4	374
		1212550	M12 × 1.25	6H	100	22	9	7	10	4	374
		1215050	M12 × 1.5	6H	100	22	9	7	10	4	374
		1217550	M12 × 1.75	6H	110	24	9	7	10	4	376
		1415050	M14 × 1.5	6H	100	22	11	9	12	4	374
		1420050	M14 × 2.0	6H	110	26	11	9	12	4	376
		1615050	M16 × 1.5	6H	100	22	12	9	12	4	374
		1620050	M16 × 2.0	6H	110	27	12	9	12	4	376
		1815050	M18 × 1.5	6H	110	25	14	11	14	4	374
		1825050	M18 × 2.5	6H	125	30	14	11	14	4	376
		2015050	M20 × 1.5	6H	125	25	16	12	15	4	374
	2025050	M20 × 2.5	6H	140	32	16	12	15	4	376	
	2215050	M22 × 1.5	6H	125	25	18	14.5	17	4	374	
	2225050	M22 × 2.5	6H	140	32	18	14.5	17	4	376	
	2415050	M24 × 1.5	6H	140	27	18	14.5	17	4	374	
	2420050	M24 × 2.0	6H	140	27	18	14.5	17	4	374	
	2430050	M24 × 3.0	6H	160	34	18	14.5	17	4	376	

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25% ~0.45%	C 0.45%~	SCM	25-45 Hrc	45-55 Hrc	50-60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VGCM

Straight flute Tap

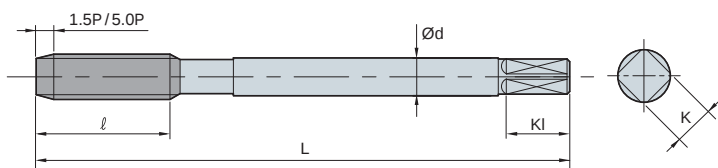
DIN

STT

TiCN

E/B
form

HSSE



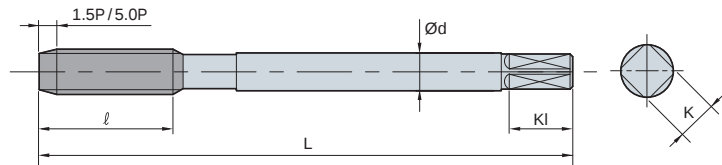
(mm)

Designation		Thread size	Limits	L	ℓ	d	K	Kl	Z	DIN type
VGCM	0305015	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
	0407015	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
	0508015	M5 × 0.8	6H	70	15	6	4.9	8	3	371
	0610015	M6 × 1.0	6H	80	17	6	4.9	8	3	371
	0810015	M8 × 1.0	6H	90	17	6	4.9	8	4	374
	0812515	M8 × 1.25	6H	90	20	8	6.2	9	4	371
	1010015	M10 × 1.0	6H	90	18	7	5.5	8	4	374
	1012515	M10 × 1.25	6H	100	22	7	5.5	8	4	374
	1015015	M10 × 1.5	6H	100	22	10	8	11	4	371
	1210015	M12 × 1.0	6H	100	18	9	7	10	4	374
	1212515	M12 × 1.25	6H	100	22	9	7	10	4	374
	1215015	M12 × 1.5	6H	100	22	9	7	10	4	374
	1217515	M12 × 1.75	6H	110	24	9	7	10	4	376
	1415015	M14 × 1.5	6H	100	22	11	9	12	4	374
	1420015	M14 × 2.0	6H	110	26	11	9	12	4	376
	1615015	M16 × 1.5	6H	100	22	12	9	12	4	374
	1620015	M16 × 2.0	6H	110	27	12	9	12	4	376
	1815015	M18 × 1.5	6H	110	25	14	11	14	4	374
	1825015	M18 × 2.5	6H	125	30	14	11	14	4	376
	2015015	M20 × 1.5	6H	125	25	16	12	15	4	374
	2025015	M20 × 2.5	6H	140	32	16	12	15	4	376
	2215015	M22 × 1.5	6H	125	25	18	14.5	17	4	374
	2225015	M22 × 2.5	6H	140	32	18	14.5	17	4	376
	2415015	M24 × 1.5	6H	140	27	18	14.5	17	4	374
	2420015	M24 × 2.0	6H	140	27	18	14.5	17	4	374
	2430015	M24 × 3.0	6H	160	34	18	14.5	17	4	376
	0305050	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
	0407050	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
	0508050	M5 × 0.8	6H	70	15	6	4.9	8	3	371
	0610050	M6 × 1.0	6H	80	17	6	4.9	8	3	371
	0810050	M8 × 1.0	6H	90	17	6	4.9	8	4	374
	0812550	M8 × 1.25	6H	90	20	8	6.2	9	4	371
	1010050	M10 × 1.0	6H	90	18	7	5.5	8	4	374
	1012550	M10 × 1.25	6H	100	22	7	5.5	8	4	374
	1015050	M10 × 1.5	6H	100	22	10	8	11	4	371
	1210050	M12 × 1.0	6H	100	18	9	7	10	4	374
	1212550	M12 × 1.25	6H	100	22	9	7	10	4	374
	1215050	M12 × 1.5	6H	100	22	9	7	10	4	374
	1217550	M12 × 1.75	6H	110	24	9	7	10	4	376
	1415050	M14 × 1.5	6H	100	22	11	9	12	4	374
	1420050	M14 × 2.0	6H	110	26	11	9	12	4	376
	1615050	M16 × 1.5	6H	100	22	12	9	12	4	374
	1620050	M16 × 2.0	6H	110	27	12	9	12	4	376
	1815050	M18 × 1.5	6H	110	25	14	11	14	4	374
	1825050	M18 × 2.5	6H	125	30	14	11	14	4	376
	2015050	M20 × 1.5	6H	125	25	16	12	15	4	374
	2025050	M20 × 2.5	6H	140	32	16	12	15	4	376
	2215050	M22 × 1.5	6H	125	25	18	14.5	17	4	374
	2225050	M22 × 2.5	6H	140	32	18	14.5	17	4	376
	2415050	M24 × 1.5	6H	140	27	18	14.5	17	4	374
	2420050	M24 × 2.0	6H	140	27	18	14.5	17	4	374
	2430050	M24 × 3.0	6H	160	34	18	14.5	17	4	376

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 Hrc	45~55 Hrc	50~60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z	DIN type
VGHM	0305015	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
	0407015	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
	0508015	M5 × 0.8	6H	70	15	6	4.9	8	3	371
	0610015	M6 × 1.0	6H	80	17	6	4.9	8	3	371
	0810015	M8 × 1.0	6H	90	17	6	4.9	8	4	374
	0812515	M8 × 1.25	6H	90	20	8	6.2	9	4	371
	1010015	M10 × 1.0	6H	90	18	7	5.5	8	4	374
	1012515	M10 × 1.25	6H	100	22	7	5.5	8	4	374
	1015015	M10 × 1.5	6H	100	22	10	8	11	4	371
	1210015	M12 × 1.0	6H	100	18	9	7	10	4	374
	1212515	M12 × 1.25	6H	100	22	9	7	10	4	374
	1215015	M12 × 1.5	6H	100	22	9	7	10	4	374
	1217515	M12 × 1.75	6H	110	24	9	7	10	4	376
	1415015	M14 × 1.5	6H	100	22	11	9	12	4	374
	1420015	M14 × 2.0	6H	110	26	11	9	12	4	376
	1615015	M16 × 1.5	6H	100	22	12	9	12	4	374
	1620015	M16 × 2.0	6H	110	27	12	9	12	4	376
	1815015	M18 × 1.5	6H	110	25	14	11	14	4	374
	1825015	M18 × 2.5	6H	125	30	14	11	14	4	376
	2015015	M20 × 1.5	6H	125	25	16	12	15	4	374
	2025015	M20 × 2.5	6H	140	32	16	12	15	4	376
	2215015	M22 × 1.5	6H	125	25	18	14.5	17	4	374
	2225015	M22 × 2.5	6H	140	32	18	14.5	17	4	376
	2415015	M24 × 1.5	6H	140	27	18	14.5	17	4	374
	2420015	M24 × 2.0	6H	140	27	18	14.5	17	4	374
	2430015	M24 × 3.0	6H	160	34	18	14.5	17	4	376
	0305050	M3 × 0.5	6H	56	11	3.5	2.7	6	3	371
	0407050	M4 × 0.7	6H	63	13	4.5	3.4	6	3	371
	0508050	M5 × 0.8	6H	70	15	6	4.9	8	3	371
	0610050	M6 × 1.0	6H	80	17	6	4.9	8	3	371
	0810050	M8 × 1.0	6H	90	17	6	4.9	8	4	374
	0812550	M8 × 1.25	6H	90	20	8	6.2	9	4	371
	1010050	M10 × 1.0	6H	90	18	7	5.5	8	4	374
	1012550	M10 × 1.25	6H	100	22	7	5.5	8	4	374
	1015050	M10 × 1.5	6H	100	22	10	8	11	4	371
	1210050	M12 × 1.0	6H	100	18	9	7	10	4	374
	1212550	M12 × 1.25	6H	100	22	9	7	10	4	374
	1215050	M12 × 1.5	6H	100	22	9	7	10	4	374
	1217550	M12 × 1.75	6H	110	24	9	7	10	4	376
	1415050	M14 × 1.5	6H	100	22	11	9	12	4	374
	1420050	M14 × 2.0	6H	110	26	11	9	12	4	376
	1615050	M16 × 1.5	6H	100	22	12	9	12	4	374
	1620050	M16 × 2.0	6H	110	27	12	9	12	4	376
	1815050	M18 × 1.5	6H	110	25	14	11	14	4	374
	1825050	M18 × 2.5	6H	125	30	14	11	14	4	376
	2015050	M20 × 1.5	6H	125	25	16	12	15	4	374
2025050	M20 × 2.5	6H	140	32	16	12	15	4	376	
2215050	M22 × 1.5	6H	125	25	18	14.5	17	4	374	
2225050	M22 × 2.5	6H	140	32	18	14.5	17	4	376	
2415050	M24 × 1.5	6H	140	27	18	14.5	17	4	374	
2420050	M24 × 2.0	6H	140	27	18	14.5	17	4	374	
2430050	M24 × 3.0	6H	160	34	18	14.5	17	4	376	

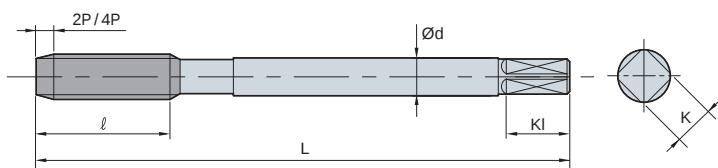
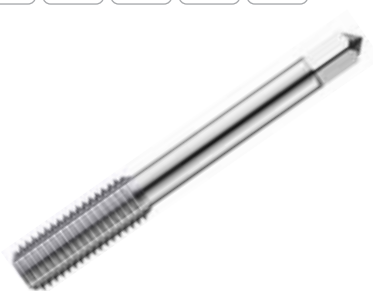
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25% ~0.45%	C 0.45%~	SCM	25-45 Hrc	45-55 Hrc	50-60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VMOM

Roll Tap



(mm)

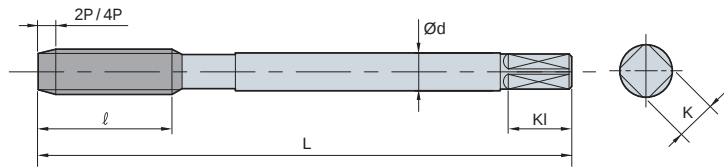
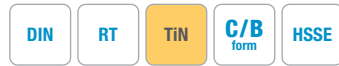
Designation		Thread size	Limits	L	ℓ	d	K	KI	Oil groove
VMOM	0305020S	M3 × 0.5	6HX	56	11	3.5	2.7	6	S
	0305020M	M3 × 0.5	6HX	56	11	3.5	2.7	6	M
	0407020S	M4 × 0.7	6HX	63	13	4.5	3.4	6	S
	0407020M	M4 × 0.7	6HX	63	13	4.5	3.4	6	M
	0508020S	M5 × 0.8	6HX	70	15	6	4.9	8	S
	0508020M	M5 × 0.8	6HX	70	15	6	4.9	8	M
	0610020S	M6 × 1.0	6HX	80	17	6	4.9	8	S
	0610020M	M6 × 1.0	6HX	80	17	6	4.9	8	M
	0810020S	M8 × 1.0	6HX	90	17	6	4.9	8	S
	0810020M	M8 × 1.0	6HX	90	17	6	4.9	8	M
	0812520S	M8 × 1.25	6HX	90	20	8	6.2	9	S
	0812520M	M8 × 1.25	6HX	90	20	8	6.2	9	M
	1010020S	M10 × 1.0	6HX	90	18	7	5.5	8	S
	1010020M	M10 × 1.0	6HX	90	18	7	5.5	8	M
	1012520S	M10 × 1.25	6HX	100	22	7	5.5	8	S
	1012520M	M10 × 1.25	6HX	100	22	7	5.5	8	M
	1015020S	M10 × 1.5	6HX	100	22	10	8	11	S
	1015020M	M10 × 1.5	6HX	100	22	10	8	11	M
	1210020S	M12 × 1.0	6HX	100	18	9	7	10	S
	1212520S	M12 × 1.25	6HX	100	22	9	7	10	S
	1212520M	M12 × 1.25	6HX	100	22	9	7	10	M
	1215020S	M12 × 1.5	6HX	100	22	9	7	10	S
	1215020M	M12 × 1.5	6HX	100	22	9	7	10	M
	1217520S	M12 × 1.75	6HX	110	24	9	7	10	S
	1217520M	M12 × 1.75	6HX	100	24	9	7	10	M
	0305040M	M3 × 0.5	6HX	56	11	3.5	2.7	6	M
	0407040M	M4 × 0.7	6HX	63	13	4.5	3.4	6	M
	0508040M	M5 × 0.8	6HX	70	15	6	4.9	8	M
	0610040M	M6 × 1.0	6HX	80	17	6	4.9	8	M
	0810040M	M8 × 1.0	6HX	90	17	6	4.9	8	M
	0812540M	M8 × 1.25	6HX	90	20	8	6.2	9	M
	1010040M	M10 × 1.0	6HX	90	18	7	5.5	8	M
	1012540M	M10 × 1.25	6HX	100	22	7	5.5	8	M
	1015040M	M10 × 1.5	6HX	100	22	10	8	11	M
	1210040M	M12 × 1.0	6HX	100	18	9	7	10	M
	1212540M	M12 × 1.25	6HX	100	22	9	7	10	M
	1215040M	M12 × 1.5	6HX	100	22	9	7	10	M
	1217540M	M12 × 1.75	6HX	100	24	9	7	10	M

Oil groove S: 1 oil groove
Oil groove M: 4 oil groove

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 Hrc	45~55 Hrc	50~60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Oil groove
VMTM	0305020S	M3 × 0.5	6HX	56	11	3.5	2.7	6	S
	0305020M	M3 × 0.5	6HX	56	11	3.5	2.7	6	M
	0407020S	M4 × 0.7	6HX	63	13	4.5	3.4	6	S
	0407020M	M4 × 0.7	6HX	63	13	4.5	3.4	6	M
	0508020S	M5 × 0.8	6HX	70	15	6	4.9	8	S
	0508020M	M5 × 0.8	6HX	70	15	6	4.9	8	M
	0610020S	M6 × 1.0	6HX	80	17	6	4.9	8	S
	0610020M	M6 × 1.0	6HX	80	17	6	4.9	8	M
	0810020S	M8 × 1.0	6HX	90	17	8	6.2	9	S
	0810020M	M8 × 1.0	6HX	90	17	8	6.2	9	M
	0812520S	M8 × 1.25	6HX	90	20	8	6.2	9	S
	0812520M	M8 × 1.25	6HX	90	20	8	6.2	9	M
	1010020S	M10 × 1.0	6HX	90	18	10	8	11	S
	1010020M	M10 × 1.0	6HX	90	18	10	8	11	M
	1012520S	M10 × 1.25	6HX	100	22	10	8	11	S
	1012520M	M10 × 1.25	6HX	100	22	10	8	11	M
	1015020S	M10 × 1.5	6HX	100	22	10	8	11	S
	1015020M	M10 × 1.5	6HX	100	22	10	8	11	M
	1210020S	M12 × 1.0	6HX	100	18	9	7	10	S
	1212520S	M12 × 1.25	6HX	100	22	9	7	10	S
	1212520M	M12 × 1.25	6HX	100	22	9	7	10	M
	1215020S	M12 × 1.5	6HX	100	22	9	7	10	S
	1215020M	M12 × 1.5	6HX	100	22	9	7	10	M
	1217520S	M12 × 1.75	6HX	110	24	9	7	10	S
	1217520M	M12 × 1.75	6HX	110	24	9	7	10	M
	0305040M	M3 × 0.5	6HX	56	11	3.5	2.7	6	M
	0407040M	M4 × 0.7	6HX	63	13	4.5	3.4	6	M
	0508040M	M5 × 0.8	6HX	70	15	6	4.9	8	M
	0610040M	M6 × 1.0	6HX	80	17	6	4.9	8	M
	0810040M	M8 × 1.0	6HX	90	17	8	6.2	9	M
	0812540M	M8 × 1.25	6HX	90	20	8	6.2	9	M
	1010040M	M10 × 1.0	6HX	90	18	10	8	11	M
	1012540M	M10 × 1.25	6HX	100	22	10	8	11	M
	1015040M	M10 × 1.5	6HX	100	22	10	8	11	M
	1210040M	M12 × 1.0	6HX	100	18	9	7	10	M
	1212540M	M12 × 1.25	6HX	100	22	9	7	10	M
	1215040M	M12 × 1.5	6HX	100	22	9	7	10	M
	1217540M	M12 × 1.75	6HX	110	24	9	7	10	M

Oil groove S: 1 oil groove
Oil groove M: 4 oil groove

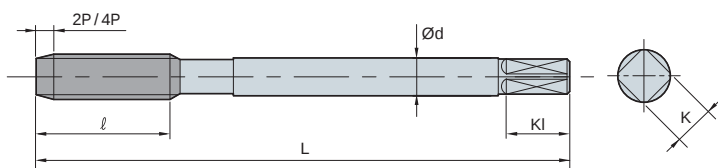
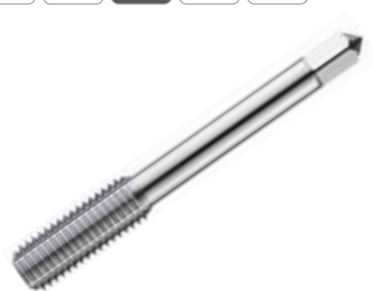
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25% ~0.45%	C 0.45%~	SCM	25~45 Hrc	45~55 Hrc	50~60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VMCM

Roll Tap



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Oil groove
VMCM	0305020S	M3 × 0.5	6HX	56	11	3.5	2.7	6	S
	0305020M	M3 × 0.5	6HX	56	11	3.5	2.7	6	M
	0407020S	M4 × 0.7	6HX	63	13	4.5	3.4	6	S
	0407020M	M4 × 0.7	6HX	63	13	4.5	3.4	6	M
	0508020S	M5 × 0.8	6HX	70	15	6	4.9	8	S
	0508020M	M5 × 0.8	6HX	70	15	6	4.9	8	M
	0610020S	M6 × 1.0	6HX	80	17	6	4.9	8	S
	0610020M	M6 × 1.0	6HX	80	17	6	4.9	8	M
	0810020S	M8 × 1.0	6HX	90	17	8	6.2	9	S
	0810020M	M8 × 1.0	6HX	90	17	8	6.2	9	M
	0812520S	M8 × 1.25	6HX	90	20	8	6.2	9	S
	0812520M	M8 × 1.25	6HX	90	20	8	6.2	9	M
	1010020S	M10 × 1.0	6HX	90	18	10	8	11	S
	1010020M	M10 × 1.0	6HX	90	18	10	8	11	M
	1012520S	M10 × 1.25	6HX	100	22	10	8	11	S
	1012520M	M10 × 1.25	6HX	100	22	10	8	11	M
	1015020S	M10 × 1.5	6HX	100	22	10	8	11	S
	1015020M	M10 × 1.5	6HX	100	22	10	8	11	M
	1210020S	M12 × 1.0	6HX	100	18	9	7	10	S
	1212520S	M12 × 1.25	6HX	100	22	9	7	10	S
	1212520M	M12 × 1.25	6HX	100	22	9	7	10	M
	1215020S	M12 × 1.5	6HX	100	22	9	7	10	S
	1215020M	M12 × 1.5	6HX	100	22	9	7	10	M
	1217520S	M12 × 1.75	6HX	110	24	9	7	10	S
	1217520M	M12 × 1.75	6HX	110	24	9	7	10	M
	0305040M	M3 × 0.5	6HX	56	11	3.5	2.7	6	M
	0407040M	M4 × 0.7	6HX	63	13	4.5	3.4	6	M
	0508040M	M5 × 0.8	6HX	70	15	6	4.9	8	M
	0610040M	M6 × 1.0	6HX	80	17	6	4.9	8	M
	0810040M	M8 × 1.0	6HX	90	17	8	6.2	9	M
	0812540M	M8 × 1.25	6HX	90	20	8	6.2	9	M
	1010040M	M10 × 1.0	6HX	90	18	10	8	11	M
	1012540M	M10 × 1.25	6HX	100	22	10	8	11	M
	1015040M	M10 × 1.5	6HX	100	22	10	8	11	M
	1210040M	M12 × 1.0	6HX	100	18	9	7	10	M
	1212540M	M12 × 1.25	6HX	100	22	9	7	10	M
	1215040M	M12 × 1.5	6HX	100	22	9	7	10	M
	1217540M	M12 × 1.75	6HX	110	24	9	7	10	M

Oil groove S: 1 oil groove
Oil groove M: 4 oil groove

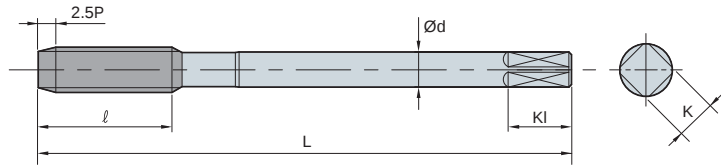
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 Hrc	45~55 Hrc	50~60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VPOM

Spiral flute Tap



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z
VPOM	0305025	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407025	M4 × 0.7	WH2	52	13	5	4	7	3
	04507525	M4.5 × 0.75	WH2	55	13	5	4	7	3
	0508025	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610025	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812525	M8 × 1.25	WH2	70	22	6.2	5	8	3
	1012525	M10 × 1.25	WH2	75	24	7	5.5	8	3
	1015025	M10 × 1.5	WH2	75	24	7	5.5	8	3
	1210025	M12 × 1.0	WH2	82	29	8.5	6.5	9	3
	1212525	M12 × 1.25	WH2	82	29	8.5	6.5	9	3
	1215025	M12 × 1.5	WH2	82	29	8.5	6.5	9	3
	1217525	M12 × 1.75	WH2	82	29	8.5	6.5	9	3
	1415025	M14 × 1.5	WH2	88	30	10.5	8	11	3
	1420025	M14 × 2.0	WH2	88	30	10.5	8	11	3
	1615025	M16 × 1.5	WH2	95	32	12.5	10	13	3
	1620025	M16 × 2.0	WH2	95	32	12.5	10	13	3
	1815025	M18 × 1.5	WH2	100	37	14	11	14	4
	1825025	M18 × 2.5	WH3	100	37	14	11	14	4
	2015025	M20 × 1.5	WH3	105	37	15	12	15	4
	2025025	M20 × 2.5	WH3	105	37	15	12	15	4
	2215025	M22 × 1.5	WH3	115	38	17	13	16	4
	2225025	M22 × 2.5	WH3	115	38	17	13	16	4
	2415025	M24 × 1.5	WH3	120	45	19	15	18	4
	2420025	M24 × 2.0	WH3	120	45	19	15	18	4
	2430025	M24 × 3.0	WH4	120	45	19	15	18	4

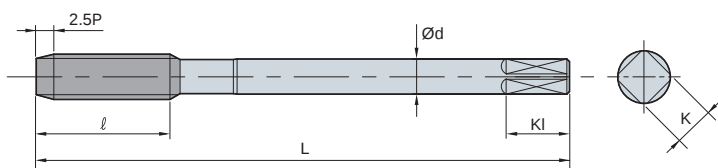
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25%~0.45%	C 0.45%~	SCM	25~45 Hrc	45~55 Hrc	50~60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VPTM

Spiral flute Tap



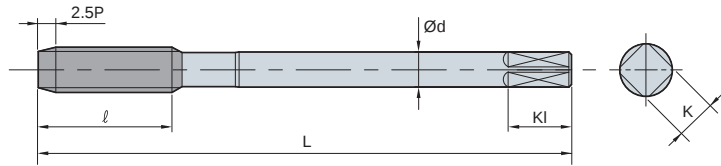
(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z
VPTM	0305025	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407025	M4 × 0.7	WH2	52	13	5	4	7	3
	04507525	M4.5 × 0.75	WH2	55	13	5	4	7	3
	0508025	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610025	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812525	M8 × 1.25	WH2	70	22	6.2	5	8	3
	1012525	M10 × 1.25	WH2	75	24	7	5.5	8	3
	1015025	M10 × 1.5	WH2	75	24	7	5.5	8	3
	1210025	M12 × 1.0	WH2	82	29	8.5	6.5	9	3
	1212525	M12 × 1.25	WH2	82	29	8.5	6.5	9	3
	1215025	M12 × 1.5	WH2	82	29	8.5	6.5	9	3
	1217525	M12 × 1.75	WH2	82	29	8.5	6.5	9	3
	1415025	M14 × 1.5	WH2	88	30	10.5	8	11	3
	1420025	M14 × 2.0	WH2	88	30	10.5	8	11	3
	1615025	M16 × 1.5	WH2	95	32	12.5	10	13	3
	1620025	M16 × 2.0	WH2	95	32	12.5	10	13	3
	1815025	M18 × 1.5	WH2	100	37	14	11	14	4
	1825025	M18 × 2.5	WH3	100	37	14	11	14	4
	2015025	M20 × 1.5	WH3	105	37	15	12	15	4
	2025025	M20 × 2.5	WH3	105	37	15	12	15	4
	2215025	M22 × 1.5	WH3	115	38	17	13	16	4
	2225025	M22 × 2.5	WH3	115	38	17	13	16	4
	2415025	M24 × 1.5	WH3	120	45	19	15	18	4
	2420025	M24 × 2.0	WH3	120	45	19	15	18	4
	2430025	M24 × 3.0	WH4	120	45	19	15	18	4

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~		25~45 HRC	45~55 HRC	50~60 HRC																	
				SCM				STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z
VPCM	0305025	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407025	M4 × 0.7	WH2	52	13	5	4	7	3
	04507525	M4.5 × 0.75	WH2	55	13	5	4	7	3
	0508025	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610025	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812525	M8 × 1.25	WH2	70	22	6.2	5	8	3
	1012525	M10 × 1.25	WH2	75	24	7	5.5	8	3
	1015025	M10 × 1.5	WH2	75	24	7	5.5	8	3
	1210025	M12 × 1.0	WH2	82	29	8.5	6.5	9	3
	1212525	M12 × 1.25	WH2	82	29	8.5	6.5	9	3
	1215025	M12 × 1.5	WH2	82	29	8.5	6.5	9	3
	1217525	M12 × 1.75	WH2	82	29	8.5	6.5	9	3
	1415025	M14 × 1.5	WH2	88	30	10.5	8	11	3
	1420025	M14 × 2.0	WH2	88	30	10.5	8	11	3
	1615025	M16 × 1.5	WH2	95	32	12.5	10	13	3
	1620025	M16 × 2.0	WH2	95	32	12.5	10	13	3
	1815025	M18 × 1.5	WH2	100	37	14	11	14	4
	1825025	M18 × 2.5	WH3	100	37	14	11	14	4
	2015025	M20 × 1.5	WH3	105	37	15	12	15	4
	2025025	M20 × 2.5	WH3	105	37	15	12	15	4
	2215025	M22 × 1.5	WH3	115	38	17	13	16	4
	2225025	M22 × 2.5	WH3	115	38	17	13	16	4
	2415025	M24 × 1.5	WH3	120	45	19	15	18	4
	2420025	M24 × 2.0	WH3	120	45	19	15	18	4
	2430025	M24 × 3.0	WH4	120	45	19	15	18	4

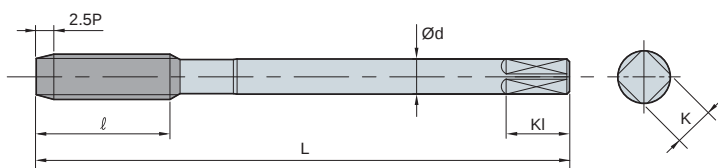
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VPHM

Spiral flute Tap



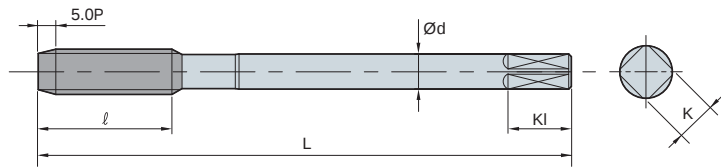
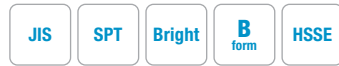
(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z
VPHM	0305025	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407025	M4 × 0.7	WH2	52	13	5	4	7	3
	04507525	M4.5 × 0.75	WH2	55	13	5	4	7	3
	0508025	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610025	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812525	M8 × 1.25	WH2	70	22	6.2	5	8	3
	1012525	M10 × 1.25	WH2	75	24	7	5.5	8	3
	1015025	M10 × 1.5	WH2	75	24	7	5.5	8	3
	1210025	M12 × 1.0	WH2	82	29	8.5	6.5	9	3
	1212525	M12 × 1.25	WH2	82	29	8.5	6.5	9	3
	1215025	M12 × 1.5	WH2	82	29	8.5	6.5	9	3
	1217525	M12 × 1.75	WH2	82	29	8.5	6.5	9	3
	1415025	M14 × 1.5	WH2	88	30	10.5	8	11	3
	1420025	M14 × 2.0	WH2	88	30	10.5	8	11	3
	1615025	M16 × 1.5	WH2	95	32	12.5	10	13	3
	1620025	M16 × 2.0	WH2	95	32	12.5	10	13	3
	1815025	M18 × 1.5	WH2	100	37	14	11	14	4
	1825025	M18 × 2.5	WH3	100	37	14	11	14	4
	2015025	M20 × 1.5	WH3	105	37	15	12	15	4
	2025025	M20 × 2.5	WH3	105	37	15	12	15	4
	2215025	M22 × 1.5	WH3	115	38	17	13	16	4
	2225025	M22 × 2.5	WH3	115	38	17	13	16	4
	2415025	M24 × 1.5	WH3	120	45	19	15	18	4
	2420025	M24 × 2.0	WH3	120	45	19	15	18	4
	2430025	M24 × 3.0	WH4	120	45	19	15	18	4

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z
VNOM	0305050	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407050	M4 × 0.7	WH2	52	13	5	4	7	3
	0508050	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610050	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812550	M8 × 1.25	WH3	70	22	6.2	5	8	3
	1012550	M10 × 1.25	WH3	75	24	7	5.5	8	3
	1015050	M10 × 1.5	WH3	75	24	7	5.5	8	3
	1210050	M12 × 1.0	WH3	82	29	8.5	6.5	9	3
	1212550	M12 × 1.25	WH3	82	29	8.5	6.5	9	3
	1215050	M12 × 1.5	WH3	82	29	8.5	6.5	9	3
	1217550	M12 × 1.75	WH4	82	29	8.5	6.5	9	3
	1415050	M14 × 1.5	WH3	88	30	10.5	8	11	3
	1420050	M14 × 2.0	WH4	88	30	10.5	8	11	3
	1615050	M16 × 1.5	WH3	95	32	12.5	10	13	3
	1620050	M16 × 2.0	WH4	95	32	12.5	10	13	3
	1815050	M18 × 1.5	WH4	100	37	14	11	14	3
	1825050	M18 × 2.5	WH4	100	37	14	11	14	3
	2015050	M20 × 1.5	WH4	105	37	15	12	15	3
	2025050	M20 × 2.5	WH4	105	37	15	12	15	3
	2215050	M22 × 1.5	WH4	115	38	17	13	16	3
	2225050	M22 × 2.5	WH4	115	38	17	13	16	3
	2415050	M24 × 1.5	WH4	120	45	19	15	18	3
	2420050	M24 × 2.0	WH4	120	45	19	15	18	3
	2430050	M24 × 3.0	WH4	120	45	19	15	18	3

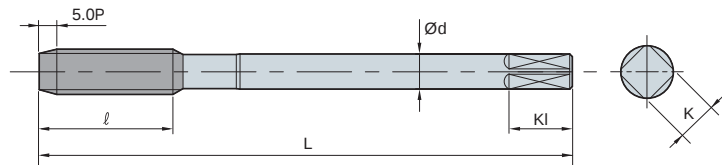
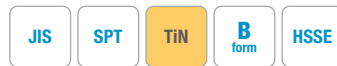
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VNTM

Spiral point Tap



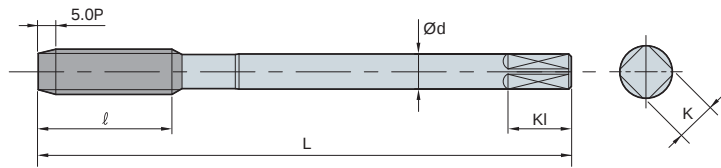
(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z
VNTM	0305050	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407050	M4 × 0.7	WH2	52	13	5	4	7	3
	0508050	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610050	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812550	M8 × 1.25	WH3	70	22	6.2	5	8	3
	1012550	M10 × 1.25	WH3	75	24	7	5.5	8	3
	1015050	M10 × 1.5	WH3	75	24	7	5.5	8	3
	1210050	M12 × 1.0	WH3	82	29	8.5	6.5	9	3
	1212550	M12 × 1.25	WH3	82	29	8.5	6.5	9	3
	1215050	M12 × 1.5	WH3	82	29	8.5	6.5	9	3
	1217550	M12 × 1.75	WH4	82	29	8.5	6.5	9	3
	1415050	M14 × 1.5	WH3	88	30	10.5	8	11	3
	1420050	M14 × 2.0	WH4	88	30	10.5	8	11	3
	1615050	M16 × 1.5	WH3	95	32	12.5	10	13	3
	1620050	M16 × 2.0	WH4	95	32	12.5	10	13	3
	1815050	M18 × 1.5	WH4	100	37	14	11	14	3
	1825050	M18 × 2.5	WH4	100	37	14	11	14	3
	2015050	M20 × 1.5	WH4	105	37	15	12	15	3
	2025050	M20 × 2.5	WH4	105	37	15	12	15	3
	2215050	M22 × 1.5	WH4	115	38	17	13	16	3
	2225050	M22 × 2.5	WH4	115	38	17	13	16	3
	2415050	M24 × 1.5	WH4	120	45	19	15	18	3
	2420050	M24 × 2.0	WH4	120	45	19	15	18	3
	2430050	M24 × 3.0	WH4	120	45	19	15	18	3

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25% ~0.45%	C 0.45%~	SCM	25~45 Hrc	45~55 Hrc	50~60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z
VNCM	0305050	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407050	M4 × 0.7	WH2	52	13	5	4	7	3
	0508050	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610050	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812550	M8 × 1.25	WH3	70	22	6.2	5	8	3
	1012550	M10 × 1.25	WH3	75	24	7	5.5	8	3
	1015050	M10 × 1.5	WH3	75	24	7	5.5	8	3
	1210050	M12 × 1.0	WH3	82	29	8.5	6.5	9	3
	1212550	M12 × 1.25	WH3	82	29	8.5	6.5	9	3
	1215050	M12 × 1.5	WH3	82	29	8.5	6.5	9	3
	1217550	M12 × 1.75	WH4	82	29	8.5	6.5	9	3
	1415050	M14 × 1.5	WH3	88	30	10.5	8	11	3
	1420050	M14 × 2.0	WH4	88	30	10.5	8	11	3
	1615050	M16 × 1.5	WH3	95	32	12.5	10	13	3
	1620050	M16 × 2.0	WH4	95	32	12.5	10	13	3
	1815050	M18 × 1.5	WH4	100	37	14	11	14	3
	1825050	M18 × 2.5	WH4	100	37	14	11	14	3
	2015050	M20 × 1.5	WH4	105	37	15	12	15	3
	2025050	M20 × 2.5	WH4	105	37	15	12	15	3
	2215050	M22 × 1.5	WH4	115	38	17	13	16	3
	2225050	M22 × 2.5	WH4	115	38	17	13	16	3
	2415050	M24 × 1.5	WH4	120	45	19	15	18	3
	2420050	M24 × 2.0	WH4	120	45	19	15	18	3
	2430050	M24 × 3.0	WH4	120	45	19	15	18	3

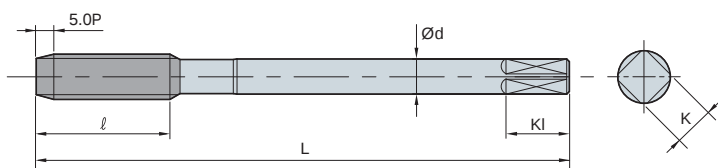
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25%~0.45%	C 0.45%~	SCM	25-45 HRC	45-55 HRC	50-60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VNHM

Spiral point Tap



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z
VNHM	0305050	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407050	M4 × 0.7	WH2	52	13	5	4	7	3
	0508050	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610050	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812550	M8 × 1.25	WH3	70	22	6.2	5	8	3
	1012550	M10 × 1.25	WH3	75	24	7	5.5	8	3
	1015050	M10 × 1.5	WH3	75	24	7	5.5	8	3
	1210050	M12 × 1.0	WH3	82	29	8.5	6.5	9	3
	1212550	M12 × 1.25	WH3	82	29	8.5	6.5	9	3
	1215050	M12 × 1.5	WH3	82	29	8.5	6.5	9	3
	1217550	M12 × 1.75	WH4	82	29	8.5	6.5	9	3
	1415050	M14 × 1.5	WH3	88	30	10.5	8	11	3
	1420050	M14 × 2.0	WH4	88	30	10.5	8	11	3
	1615050	M16 × 1.5	WH3	95	32	12.5	10	13	3
	1620050	M16 × 2.0	WH4	95	32	12.5	10	13	3
	1815050	M18 × 1.5	WH4	100	37	14	11	14	3
	1825050	M18 × 2.5	WH4	100	37	14	11	14	3
	2015050	M20 × 1.5	WH4	105	37	15	12	15	3
	2025050	M20 × 2.5	WH4	105	37	15	12	15	3
	2215050	M22 × 1.5	WH4	115	38	17	13	16	3
	2225050	M22 × 2.5	WH4	115	38	17	13	16	3
	2415050	M24 × 1.5	WH4	120	45	19	15	18	3
	2420050	M24 × 2.0	WH4	120	45	19	15	18	3
	2430050	M24 × 3.0	WH4	120	45	19	15	18	3

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 Hrc	45~55 Hrc	50~60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

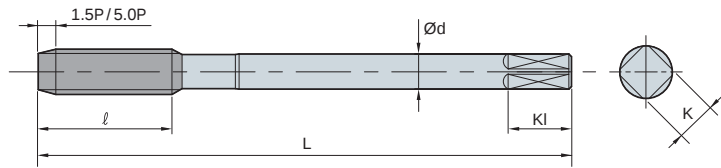
JIS

STT

Bright

E/B
form

HSSE



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z
VSOM	0305015	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407015	M4 × 0.7	WH2	52	13	5	4	7	3
	0508015	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610015	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812515	M8 × 1.25	WH2	70	22	6.2	5	8	4
	1012515	M10 × 1.25	WH2	75	24	7	5.5	8	4
	1015015	M10 × 1.5	WH3	75	24	7	5.5	8	4
	1210015	M12 × 1.0	WH2	82	29	8.5	6.5	9	4
	1212515	M12 × 1.25	WH2	82	29	8.5	6.5	9	4
	1215015	M12 × 1.5	WH3	82	29	8.5	6.5	9	4
	1217515	M12 × 1.75	WH3	82	29	8.5	6.5	9	4
	1415015	M14 × 1.5	WH3	88	30	10.5	8	11	4
	1420015	M14 × 2.0	WH3	88	30	10.5	8	11	4
	1615015	M16 × 1.5	WH3	95	32	12.5	10	13	4
	1620015	M16 × 2.0	WH3	95	32	12.5	10	13	4
	1815015	M18 × 1.5	WH3	100	37	14	11	14	4
	1825015	M18 × 2.5	WH3	100	37	14	11	14	4
	2015015	M20 × 1.5	WH3	105	37	15	12	15	4
	2025015	M20 × 2.5	WH3	105	37	15	12	15	4
	2215015	M22 × 1.5	WH3	115	38	17	13	16	4
	2225015	M22 × 2.5	WH3	115	38	17	13	16	4
	2415015	M24 × 1.5	WH3	120	45	19	15	18	4
	2420015	M24 × 2.0	WH3	120	45	19	15	18	4
	2430015	M24 × 3.0	WH3	120	45	19	15	18	4
	0305050	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407050	M4 × 0.7	WH2	52	13	5	4	7	3
	0508050	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610050	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812550	M8 × 1.25	WH2	70	22	6.2	5	8	4
	1012550	M10 × 1.25	WH2	75	24	7	5.5	8	4
	1015050	M10 × 1.5	WH3	75	24	7	5.5	8	4
	1210050	M12 × 1.0	WH2	82	29	8.5	6.5	9	4
	1212550	M12 × 1.25	WH2	82	29	8.5	6.5	9	4
	1215050	M12 × 1.5	WH3	82	29	8.5	6.5	9	4
	1217550	M12 × 1.75	WH3	82	29	8.5	6.5	9	4
	1415050	M14 × 1.5	WH3	88	30	10.5	8	11	4
	1420050	M14 × 2.0	WH3	88	30	10.5	8	11	4
	1615050	M16 × 1.5	WH3	95	32	12.5	10	13	4
	1620050	M16 × 2.0	WH3	95	32	12.5	10	13	4
	1815050	M18 × 1.5	WH3	100	37	14	11	14	4
	1825050	M18 × 2.5	WH3	100	37	14	11	14	4
	2015050	M20 × 1.5	WH3	105	37	15	12	15	4
	2025050	M20 × 2.5	WH3	105	37	15	12	15	4
	2215050	M22 × 1.5	WH3	115	38	17	13	16	4
	2225050	M22 × 2.5	WH3	115	38	17	13	16	4
	2415050	M24 × 1.5	WH3	120	45	19	15	18	4
	2420050	M24 × 2.0	WH3	120	45	19	15	18	4
	2430050	M24 × 3.0	WH3	120	45	19	15	18	4

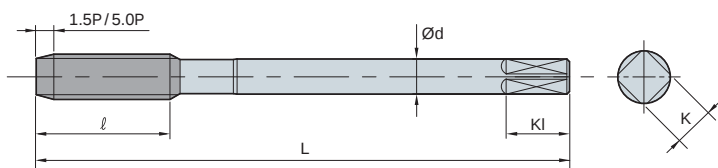
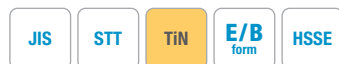
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25%~0.45%	C 0.45%~	SCM	25-45 HRC	45-55 HRC	50-60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VSTM

Straight flute Tap



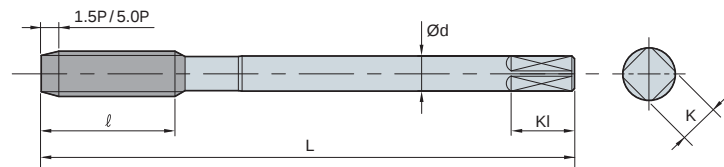
(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z
VSTM	0305015	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407015	M4 × 0.7	WH2	52	13	5	4	7	3
	0508015	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610015	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812515	M8 × 1.25	WH2	70	22	6.2	5	8	4
	1012515	M10 × 1.25	WH2	75	24	7	5.5	8	4
	1015015	M10 × 1.5	WH3	75	24	7	5.5	8	4
	1210015	M12 × 1.0	WH2	82	29	8.5	6.5	9	4
	1212515	M12 × 1.25	WH2	82	29	8.5	6.5	9	4
	1215015	M12 × 1.5	WH3	82	29	8.5	6.5	9	4
	1217515	M12 × 1.75	WH3	82	29	8.5	6.5	9	4
	1415015	M14 × 1.5	WH3	88	30	10.5	8	11	4
	1420015	M14 × 2.0	WH3	88	30	10.5	8	11	4
	1615015	M16 × 1.5	WH3	95	32	12.5	10	13	4
	1620015	M16 × 2.0	WH3	95	32	12.5	10	13	4
	1815015	M18 × 1.5	WH3	100	37	14	11	14	4
	1825015	M18 × 2.5	WH3	100	37	14	11	14	4
	2015015	M20 × 1.5	WH3	105	37	15	12	15	4
	2025015	M20 × 2.5	WH3	105	37	15	12	15	4
	2215015	M22 × 1.5	WH3	115	38	17	13	16	4
	2225015	M22 × 2.5	WH3	115	38	17	13	16	4
	2415015	M24 × 1.5	WH3	120	45	19	15	18	4
	2420015	M24 × 2.0	WH3	120	45	19	15	18	4
	2430015	M24 × 3.0	WH3	120	45	19	15	18	4
	0305050	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407050	M4 × 0.7	WH2	52	13	5	4	7	3
	0508050	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610050	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812550	M8 × 1.25	WH2	70	22	6.2	5	8	4
	1012550	M10 × 1.25	WH2	75	24	7	5.5	8	4
	1015050	M10 × 1.5	WH3	75	24	7	5.5	8	4
	1210050	M12 × 1.0	WH2	82	29	8.5	6.5	9	4
	1212550	M12 × 1.25	WH2	82	29	8.5	6.5	9	4
	1215050	M12 × 1.5	WH3	82	29	8.5	6.5	9	4
	1217550	M12 × 1.75	WH3	82	29	8.5	6.5	9	4
	1415050	M14 × 1.5	WH3	88	30	10.5	8	11	4
	1420050	M14 × 2.0	WH3	88	30	10.5	8	11	4
	1615050	M16 × 1.5	WH3	95	32	12.5	10	13	4
	1620050	M16 × 2.0	WH3	95	32	12.5	10	13	4
	1815050	M18 × 1.5	WH3	100	37	14	11	14	4
	1825050	M18 × 2.5	WH3	100	37	14	11	14	4
	2015050	M20 × 1.5	WH3	105	37	15	12	15	4
	2025050	M20 × 2.5	WH3	105	37	15	12	15	4
	2215050	M22 × 1.5	WH3	115	38	17	13	16	4
	2225050	M22 × 2.5	WH3	115	38	17	13	16	4
	2415050	M24 × 1.5	WH3	120	45	19	15	18	4
	2420050	M24 × 2.0	WH3	120	45	19	15	18	4
	2430050	M24 × 3.0	WH3	120	45	19	15	18	4

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z
VSCM	0305015	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407015	M4 × 0.7	WH2	52	13	5	4	7	3
	0508015	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610015	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812515	M8 × 1.25	WH2	70	22	6.2	5	8	4
	1012515	M10 × 1.25	WH2	75	24	7	5.5	8	4
	1015015	M10 × 1.5	WH3	75	24	7	5.5	8	4
	1210015	M12 × 1.0	WH2	82	29	8.5	6.5	9	4
	1212515	M12 × 1.25	WH2	82	29	8.5	6.5	9	4
	1215015	M12 × 1.5	WH3	82	29	8.5	6.5	9	4
	1217515	M12 × 1.75	WH3	82	29	8.5	6.5	9	4
	1415015	M14 × 1.5	WH3	88	30	10.5	8	11	4
	1420015	M14 × 2.0	WH3	88	30	10.5	8	11	4
	1615015	M16 × 1.5	WH3	95	32	12.5	10	13	4
	1620015	M16 × 2.0	WH3	95	32	12.5	10	13	4
	1815015	M18 × 1.5	WH3	100	37	14	11	14	4
	1825015	M18 × 2.5	WH3	100	37	14	11	14	4
	2015015	M20 × 1.5	WH3	105	37	15	12	15	4
	2025015	M20 × 2.5	WH3	105	37	15	12	15	4
	2215015	M22 × 1.5	WH3	115	38	17	13	16	4
	2225015	M22 × 2.5	WH3	115	38	17	13	16	4
	2415015	M24 × 1.5	WH3	120	45	19	15	18	4
	2420015	M24 × 2.0	WH3	120	45	19	15	18	4
	2430015	M24 × 3.0	WH3	120	45	19	15	18	4
	0305050	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407050	M4 × 0.7	WH2	52	13	5	4	7	3
	0508050	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610050	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812550	M8 × 1.25	WH2	70	22	6.2	5	8	4
	1012550	M10 × 1.25	WH2	75	24	7	5.5	8	4
	1015050	M10 × 1.5	WH3	75	24	7	5.5	8	4
	1210050	M12 × 1.0	WH2	82	29	8.5	6.5	9	4
	1212550	M12 × 1.25	WH2	82	29	8.5	6.5	9	4
	1215050	M12 × 1.5	WH3	82	29	8.5	6.5	9	4
	1217550	M12 × 1.75	WH3	82	29	8.5	6.5	9	4
	1415050	M14 × 1.5	WH3	88	30	10.5	8	11	4
	1420050	M14 × 2.0	WH3	88	30	10.5	8	11	4
	1615050	M16 × 1.5	WH3	95	32	12.5	10	13	4
	1620050	M16 × 2.0	WH3	95	32	12.5	10	13	4
	1815050	M18 × 1.5	WH3	100	37	14	11	14	4
	1825050	M18 × 2.5	WH3	100	37	14	11	14	4
	2015050	M20 × 1.5	WH3	105	37	15	12	15	4
	2025050	M20 × 2.5	WH3	105	37	15	12	15	4
	2215050	M22 × 1.5	WH3	115	38	17	13	16	4
	2225050	M22 × 2.5	WH3	115	38	17	13	16	4
	2415050	M24 × 1.5	WH3	120	45	19	15	18	4
	2420050	M24 × 2.0	WH3	120	45	19	15	18	4
	2430050	M24 × 3.0	WH3	120	45	19	15	18	4

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C0.25% ~0.45%	C 0.45%~	SCM	25-45 Hrc	45-55 Hrc	50-60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VSHM

Straight flute Tap

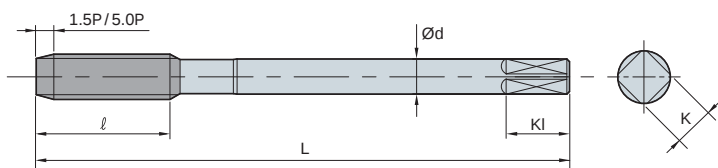
JIS

STT

HOMO

E/B
form

HSSE



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Z
VSHM	0305015	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407015	M4 × 0.7	WH2	52	13	5	4	7	3
	0508015	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610015	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812515	M8 × 1.25	WH2	70	22	6.2	5	8	4
	1012515	M10 × 1.25	WH2	75	24	7	5.5	8	4
	1015015	M10 × 1.5	WH3	75	24	7	5.5	8	4
	1210015	M12 × 1.0	WH2	82	29	8.5	6.5	9	4
	1212515	M12 × 1.25	WH2	82	29	8.5	6.5	9	4
	1215015	M12 × 1.5	WH3	82	29	8.5	6.5	9	4
	1217515	M12 × 1.75	WH3	82	29	8.5	6.5	9	4
	1415015	M14 × 1.5	WH3	88	30	10.5	8	11	4
	1420015	M14 × 2.0	WH3	88	30	10.5	8	11	4
	1615015	M16 × 1.5	WH3	95	32	12.5	10	13	4
	1620015	M16 × 2.0	WH3	95	32	12.5	10	13	4
	1815015	M18 × 1.5	WH3	100	37	14	11	14	4
	1825015	M18 × 2.5	WH3	100	37	14	11	14	4
	2015015	M20 × 1.5	WH3	105	37	15	12	15	4
	2025015	M20 × 2.5	WH3	105	37	15	12	15	4
	2215015	M22 × 1.5	WH3	115	38	17	13	16	4
	2225015	M22 × 2.5	WH3	115	38	17	13	16	4
	2415015	M24 × 1.5	WH3	120	45	19	15	18	4
	2420015	M24 × 2.0	WH3	120	45	19	15	18	4
	2430015	M24 × 3.0	WH3	120	45	19	15	18	4
	0305050	M3 × 0.5	WH2	46	11	4	3.2	6	3
	0407050	M4 × 0.7	WH2	52	13	5	4	7	3
	0508050	M5 × 0.8	WH2	60	16	5.5	4.5	7	3
	0610050	M6 × 1.0	WH2	62	19	6	4.5	7	3
	0812550	M8 × 1.25	WH2	70	22	6.2	5	8	4
	1012550	M10 × 1.25	WH2	75	24	7	5.5	8	4
	1015050	M10 × 1.5	WH3	75	24	7	5.5	8	4
	1210050	M12 × 1.0	WH2	82	29	8.5	6.5	9	4
	1212550	M12 × 1.25	WH2	82	29	8.5	6.5	9	4
	1215050	M12 × 1.5	WH3	82	29	8.5	6.5	9	4
	1217550	M12 × 1.75	WH3	82	29	8.5	6.5	9	4
	1415050	M14 × 1.5	WH3	88	30	10.5	8	11	4
	1420050	M14 × 2.0	WH3	88	30	10.5	8	11	4
	1615050	M16 × 1.5	WH3	95	32	12.5	10	13	4
	1620050	M16 × 2.0	WH3	95	32	12.5	10	13	4
	1815050	M18 × 1.5	WH3	100	37	14	11	14	4
	1825050	M18 × 2.5	WH3	100	37	14	11	14	4
	2015050	M20 × 1.5	WH3	105	37	15	12	15	4
	2025050	M20 × 2.5	WH3	105	37	15	12	15	4
	2215050	M22 × 1.5	WH3	115	38	17	13	16	4
	2225050	M22 × 2.5	WH3	115	38	17	13	16	4
	2415050	M24 × 1.5	WH3	120	45	19	15	18	4
	2420050	M24 × 2.0	WH3	120	45	19	15	18	4
	2430050	M24 × 3.0	WH3	120	45	19	15	18	4

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 Hrc	45~55 Hrc	50~60 Hrc	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

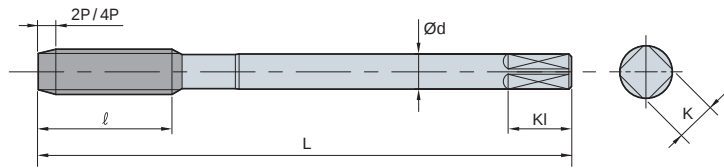
JIS

RT

Bright

C/B
form

HSSE



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Oil groove
VROM	0305020S	M3 × 0.5	GH5	46	11	4	3.2	6	S
	0305020M	M3 × 0.5	GH5	46	11	4	3.2	6	M
	0407020S	M4 × 0.7	GH6	52	13	5	4	7	S
	0407020M	M4 × 0.7	GH6	52	13	5	4	7	M
	0508020S	M5 × 0.8	GH6	60	16	5.5	4.5	7	S
	0508020M	M5 × 0.8	GH6	60	16	5.5	4.5	7	M
	0610020S	M6 × 1.0	GH7	62	19	6	4.5	7	S
	0610020M	M6 × 1.0	GH7	62	19	6	4.5	7	M
	0812520S	M8 × 1.25	GH7	70	22	6.2	5	8	S
	0812520M	M8 × 1.25	GH7	70	22	6.2	5	8	M
	1012520S	M10 × 1.25	GH7	75	24	7	5.5	8	S
	1012520M	M10 × 1.25	GH7	75	24	7	5.5	8	M
	1015020S	M10 × 1.5	GH7	75	24	7	5.5	8	S
	1015020M	M10 × 1.5	GH7	75	24	7	5.5	8	M
	1210020S	M12 × 1.0	GH7	82	29	8.5	6.5	9	S
	1210020M	M12 × 1.0	GH7	82	29	8.5	6.5	9	M
	1212520S	M12 × 1.25	GH7	82	29	8.5	6.5	9	S
	1212520M	M12 × 1.25	GH7	82	29	8.5	6.5	9	M
	1215020S	M12 × 1.5	GH7	82	29	8.5	6.5	9	S
	1215020M	M12 × 1.5	GH7	82	29	8.5	6.5	9	M
	1217520S	M12 × 1.75	GH8	82	29	8.5	6.5	9	S
	1217520M	M12 × 1.75	GH8	82	29	8.5	6.5	9	M
	0305040M	M3 × 0.5	GH5	46	11	4	3.2	6	M
	0407040M	M4 × 0.7	GH6	52	13	5	4	7	M
	0508040M	M5 × 0.8	GH6	60	16	5.5	4.5	7	M
	0610040M	M6 × 1.0	GH7	62	19	6	4.5	7	M
	0812540M	M8 × 1.25	GH7	70	22	6.2	5	8	M
	1012540M	M10 × 1.25	GH7	75	24	7	5.5	8	M
	1015040M	M10 × 1.5	GH7	75	24	7	5.5	8	M
	1210040M	M12 × 1.0	GH7	82	29	8.5	6.5	9	M
	1212540M	M12 × 1.25	GH7	82	29	8.5	6.5	9	M
	1215040M	M12 × 1.5	GH7	82	29	8.5	6.5	9	M
	1217540M	M12 × 1.75	GH8	82	29	8.5	6.5	9	M

Oil groove S: 1 oil groove
Oil groove M: 4 oil groove

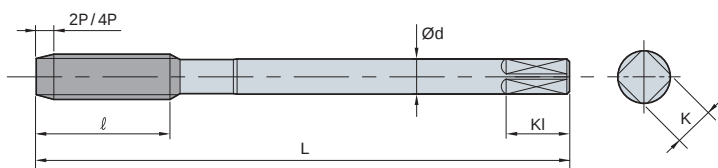
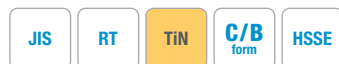
• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~		25~45 HRC	45~55 HRC	50~60 HRC																	
				SCM				STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VRTM

Roll Tap



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Oil groove
VRTM	0305020S	M3 × 0.5	GH5	46	11	4	3.2	6	S
	0305020M	M3 × 0.5	GH6	46	11	4	3.2	6	M
	0407020S	M4 × 0.7	GH6	52	13	5	4	7	S
	0407020M	M4 × 0.7	GH6	52	13	5	4	7	M
	0508020S	M5 × 0.8	GH6	60	16	5.5	4.5	7	S
	0508020M	M5 × 0.8	GH6	60	16	5.5	4.5	7	M
	0610020S	M6 × 1.0	GH7	62	19	6	4.5	7	S
	0610020M	M6 × 1.0	GH7	62	19	6	4.5	7	M
	0812520S	M8 × 1.25	GH7	70	22	6.2	5	8	S
	0812520M	M8 × 1.25	GH7	70	22	6.2	5	8	M
	1012520S	M10 × 1.25	GH7	75	24	7	5.5	8	S
	1012520M	M10 × 1.25	GH7	75	24	7	5.5	8	M
	1015020S	M10 × 1.5	GH7	75	24	7	5.5	8	S
	1015020M	M10 × 1.5	GH7	75	24	7	5.5	8	M
	1210020S	M12 × 1.0	GH7	82	29	8.5	6.5	9	S
	1210020M	M12 × 1.0	GH7	82	29	8.5	6.5	9	M
	1212520S	M12 × 1.25	GH7	82	29	8.5	6.5	9	S
	1212520M	M12 × 1.25	GH7	82	29	8.5	6.5	9	M
	1215020S	M12 × 1.5	GH7	82	29	8.5	6.5	9	S
	1215020M	M12 × 1.5	GH7	82	29	8.5	6.5	9	M
	1217520S	M12 × 1.75	GH8	82	29	8.5	6.5	9	S
	1217520M	M12 × 1.75	GH8	82	29	8.5	6.5	9	M
	0305040M	M3 × 0.5	GH6	46	11	4	3.2	6	M
	0407040M	M4 × 0.7	GH6	52	13	5	4	7	M
	0508040M	M5 × 0.8	GH6	60	16	5.5	4.5	7	M
	0610040M	M6 × 1.0	GH7	62	19	6	4.5	7	M
	0812540M	M8 × 1.25	GH7	70	22	6.2	5	8	M
	1012540M	M10 × 1.25	GH7	75	24	7	5.5	8	M
	1015040M	M10 × 1.5	GH7	75	24	7	5.5	8	M
	1210040M	M12 × 1.0	GH7	82	29	8.5	6.5	9	M
	1212540M	M12 × 1.25	GH7	82	29	8.5	6.5	9	M
	1215040M	M12 × 1.5	GH7	82	29	8.5	6.5	9	M
	1217540M	M12 × 1.75	GH8	82	29	8.5	6.5	9	M

Oil groove S: 1 oil groove
Oil groove M: 4 oil groove

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~		25~45 HRC	45~55 HRC	50~60 HRC																	
				SCM				STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

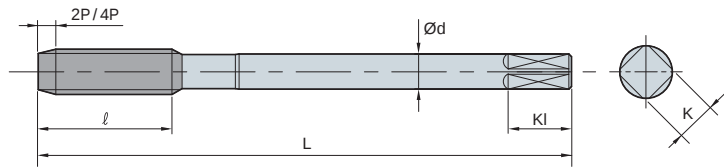
JIS

RT

TiCN

C/B
form

HSSE



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI	Oil groove
VRCM	0305020S	M3 × 0.5	GH5	46	11	4	3.2	6	S
	0305020M	M3 × 0.5	GH5	46	11	4	3.2	6	M
	0407020S	M4 × 0.7	GH6	52	13	5	4	7	S
	0407020M	M4 × 0.7	GH6	52	13	5	4	7	M
	0508020S	M5 × 0.8	GH6	60	16	5.5	4.5	7	S
	0508020M	M5 × 0.8	GH6	60	16	5.5	4.5	7	M
	0610020S	M6 × 1.0	GH7	62	19	6	4.5	7	S
	0610020M	M6 × 1.0	GH7	62	19	6	4.5	7	M
	0812520S	M8 × 1.25	GH7	70	22	6.2	5	8	S
	0812520M	M8 × 1.25	GH7	70	22	6.2	5	8	M
	1012520S	M10 × 1.25	GH7	75	24	7	5.5	8	S
	1012520M	M10 × 1.25	GH7	75	24	7	5.5	8	M
	1015020S	M10 × 1.50	GH7	75	24	7	5.5	8	S
	1015020M	M10 × 1.50	GH7	75	24	7	5.5	8	M
	1210020S	M12 × 1.0	GH7	82	29	8.5	6.5	9	S
	1210020M	M12 × 1.0	GH7	82	29	8.5	6.5	9	M
	1212520S	M12 × 1.25	GH7	82	29	8.5	6.5	9	S
	1212520M	M12 × 1.25	GH7	82	29	8.5	6.5	9	M
	1215020S	M12 × 1.5	GH7	82	29	8.5	6.5	9	S
	1215020M	M12 × 1.5	GH7	82	29	8.5	6.5	9	M
	1217520S	M12 × 1.75	GH8	82	29	8.5	6.5	9	S
	1217520M	M12 × 1.75	GH8	82	29	8.5	6.5	9	M
	0305040M	M3 × 0.5	GH5	46	11	4	3.2	6	M
	0407040M	M4 × 0.7	GH6	52	13	5	4	7	M
	0508040M	M5 × 0.8	GH6	60	16	5.5	4.5	7	M
	0610040M	M6 × 1.0	GH7	62	19	6	4.5	7	M
	0812540M	M8 × 1.25	GH7	70	22	6.2	5	8	M
	1012540M	M10 × 1.25	GH7	75	24	7	5.5	8	M
	1015040M	M10 × 1.50	GH7	75	24	7	5.5	8	M
	1210040M	M12 × 1.0	GH7	82	29	8.5	6.5	9	M
	1212540M	M12 × 1.25	GH7	82	29	8.5	6.5	9	M
	1215040M	M12 × 1.5	GH7	82	29	8.5	6.5	9	M
	1217540M	M12 × 1.75	GH8	82	29	8.5	6.5	9	M

Oil groove S: 1 oil groove
Oil groove M: 4 oil groove

• Applicable workpiece range

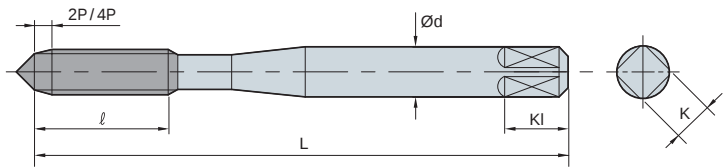
: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~		25~45 HRC	45~55 HRC	50~60 HRC																	
				SCM				STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VFOM

Spiral roll Tap

- JIS
- SRT
- Bright
- C/B
form
- HSSE



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI
VFOM	0305020	M3 × 0.5	GH6	46	18	4	3.2	6
	03506020	M3.5 × 0.6	GH6	46	18	4	3.2	6
	0407020	M4 × 0.7	GH7	52	20	5	4	7
	0508020	M5 × 0.8	GH7	60	22	5.5	4.5	7
	0610020	M6 × 1.0	GH7	62	24	6	4.5	7
	0305040	M3 × 0.5	GH6	46	18	4	3.2	6
	03506040	M3.5 × 0.6	GH6	46	18	4	3.2	6
	0407040	M4 × 0.7	GH7	52	20	5	4	7
	0508040	M5 × 0.8	GH7	60	22	5.5	4.5	7
	0610040	M6 × 1.0	GH7	62	24	6	4.5	7

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~		25~45 HRC	45~55 HRC	50~60 HRC																	
				SCM				STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

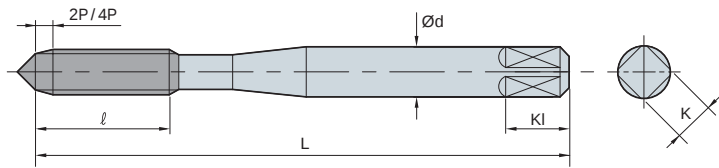
JIS

SRT

TIN

C/B
form

HSSE



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI
VFTM	0305020	M3 × 0.5	GH6	46	18	4	3.2	6
	03506020	M3.5 × 0.6	GH6	46	18	4	3.2	6
	0407020	M4 × 0.7	GH7	52	20	5	4	7
	0508020	M5 × 0.8	GH7	60	22	5.5	4.5	7
	0610020	M6 × 1.0	GH7	62	24	6	4.5	7
	0305040	M3 × 0.5	GH6	46	18	4	3.2	6
	03506040	M3.5 × 0.6	GH6	46	18	4	3.2	6
	0407040	M4 × 0.7	GH7	52	20	5	4	7
	0508040	M5 × 0.8	GH7	60	22	5.5	4.5	7
	0610040	M6 × 1.0	GH7	62	24	6	4.5	7

• Applicable workpiece range

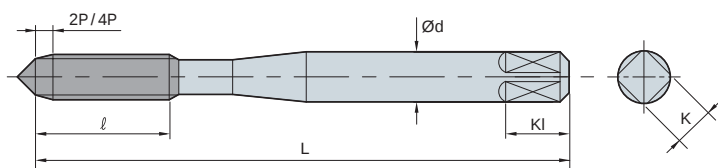
: Excellent

: Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~	SCM	25~45 HRC	45~55 HRC	50~60 HRC	STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

VFCM

Spiral roll Tap



(mm)

Designation		Thread size	Limits	L	ℓ	d	K	KI
VFCM	0305020	M3 × 0.5	GH6	46	18	4	3.2	6
	03506020	M3.5 × 0.6	GH6	46	18	4	3.2	6
	0407020	M4 × 0.7	GH7	52	20	5	4	7
	0508020	M5 × 0.8	GH7	60	22	5.5	4.5	7
	0610020	M6 × 1.0	GH7	62	24	6	4.5	7
	0305040	M3 × 0.5	GH6	46	18	4	3.2	6
	03506040	M3.5 × 0.6	GH6	46	18	4	3.2	6
	0407040	M4 × 0.7	GH7	52	20	5	4	7
	0508040	M5 × 0.8	GH7	60	22	5.5	4.5	7
	0610040	M6 × 1.0	GH7	62	24	6	4.5	7

• Applicable workpiece range

: Excellent : Good

Division	Carbon steel			Alloy steel	Quenched and tempered steel			Stainless steel	Tool steel	Cast steel	Cast iron	Ductile cast iron	Copper	Brass	Brass cast	Bronze	Aluminum rolled material	Aluminum cast, alloyed	Magnesium cast, alloyed	Zinc cast, alloyed	Titanium alloy	Nickel alloy	Thermo setting plastic	Thermo plastic
	C ~0.25%	C 0.25%~0.45%	C 0.45%~		25~45 HRC	45~55 HRC	50~60 HRC																	
				SCM				STS	SKD	SC	GC	GCD	Cu	Bs	BsC	PB	AL	AC ADC	MC	ZDC	Ti	Ni	-	-

DTN (Tapping holder)

Code system

BT40	-	DTN	-	22	-	130
Spindle		Tapping holder		Max. chucking dia.		Length

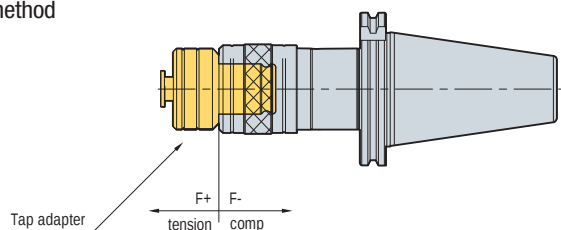
Features

- Fast and convenient tool change
- Using an adapter with a tensile and shrinking device
- Boring range : M3 ~ M38



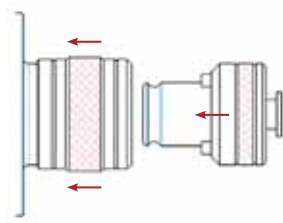
Easy TCA (Tap adapter) change

- Fast tap change per adapter pi based on the one-touch change method that enables high accuracy and a long service life and useful for various machining operations
- Enables tension and contraction using the axial direction floating method



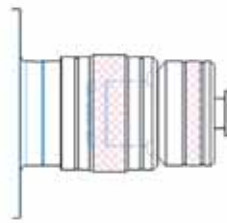
How to clamp TCA and a Tap holder

TCA insertion



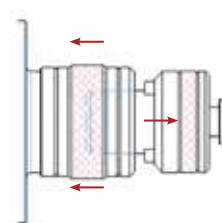
1. Insert TCA after pressing the tap holder cover down.
2. Connect TCA to be aligned with the key groove and press it until the sound "click" is heard.

TCA mounting



3. The tap holder cover is put in the normal position.

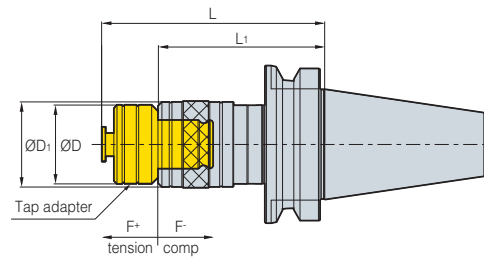
TCA removal



4. Remove TCA after pressing the tap holder cover.

BT-DTN

Tapping holder



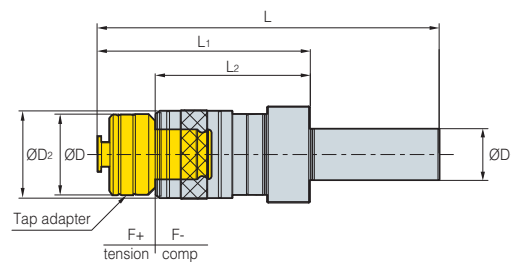
(mm)

Designation		Stock	Tapping range	ØD	ØD ₁	L	L ₁	Adaptor	F-	F+	Kg
BT30-	DTN12-85	●	M3~M12	32	39	85	60	TCA1-M	4	10	0.5
BT40-	DTN12-90	●	M3~M12	32	39	90	65	TCA1-M	4	10	1.2
	DTN12-120	●	M3~M12	32	39	120	95	TCA1-M	4	10	1.5
	DTN22-130	●	M8~M24	50	56	130	96	TCA2-M	12.5	12.5	1.7
	DTN22-160	●	M8~M24	50	56	160	126	TCA2-M	12.5	12.5	2.2
BT50-	DTN12-100	●	M3~M12	32	39	100	75	TCA1-M	4	10	3.9
	DTN12-130	●	M3~M12	32	39	130	105	TCA1-M	4	10	3.9
	DTN22-140	●	M8~M24	50	56	140	106	TCA2-M	12.5	12.5	4.3
	DTN22-170	●	M8~M24	50	56	170	136	TCA2-M	12.5	12.5	4.7
	DTN38-185	●	M16~M38	72	81	185	140	TCA3-M	20	20	5.7
	DTN38-215	●	M16~M38	72	81	215	170	TCA3-M	20	20	6.7

● : Stock item

S-DTN

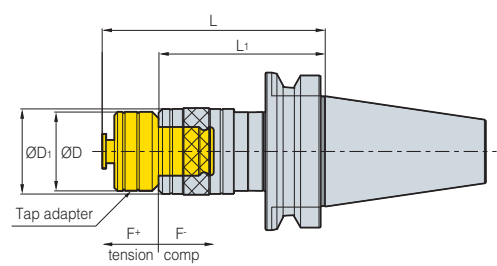
Straight shank tapping holder



(mm)

Designation	Stock	Tapping range	ØD	ØD1	ØD2	L	L1	L2	Adaptor	F-	F+	Kg
S32- DTN12-90	●	M3~M12	32	32	39	170	90	65	TCA1	4	10	1.0
DTN22-130	●	M8~M24	50	32	56	210	130	96	TCA2	12.5	12.5	1.8

● : Stock item



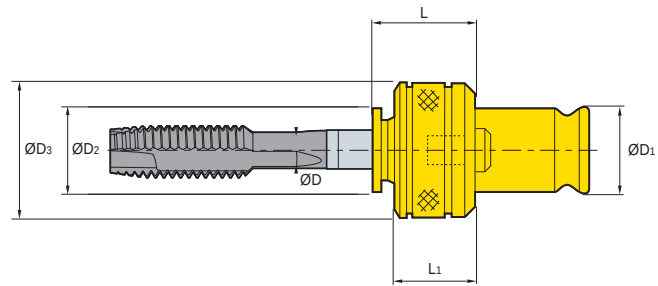
(mm)

Designation		Stock	Tapping range	ØD	ØD1	L	L1	Adaptor	F-	F+	Kg
SK40-	DTN12-90	●	M3~M12	32	39	90	65	TCA1-M	4	10	1.0
	DTN22-130	●	M8~M24	50	56	130	96	TCA2-M	12.5	12.5	1.6
SK50-	DTN12-100	●	M3~M12	32	39	100	75	TCA1-M	4	10	2.9
	DTN22-140	●	M8~M24	50	56	140	106	TCA2-M	12.5	12.5	3.5

● : Stock item

TCA

Tapping holder



(mm)

Designation		Stock	ØD	ØD ₁	ØD ₂	ØD ₃	L	L ₁	W	Kg
TCA1-	M3	●	4	19	19	32	27	25	3	0.2
	M4	●	5	19	19	32	27	25	4	0.2
	M5	●	6	19	19	32	27	25	4	0.2
	M6	●	6	19	19	32	27	25	4	0.2
	M8	●	6.2	19	19	32	27	25	5	0.2
	M10	●	7	19	19	32	27	25	6	0.2
	M11	●	8	19	19	32	27	25	6	0.2
	M12	●	9	19	19	32	27	25	7	0.2
TCA2-	M8	●	6.2	31	29	50	34	31	5	0.5
	M10	●	7	31	29	50	34	31	6	0.5
	M12	●	8.5	31	29	50	34	31	7	0.5
	M14	●	11	31	29	50	34	31	8	0.5
	P1/4	●	11	31	29	50	34	31	9	0.5
	M16	●	13	31	29	50	34	31	10	0.5
	M18	●	14	31	29	50	34	31	11	0.5
	M20	●	15	31	29	50	34	31	12	0.5
	M22	●	17	31	29	50	34	31	13	0.5
	P1/2	●	18	31	29	50	34	31	14	0.5
	M24	●	19	31	29	50	34	31	15	0.5
	TCA3-	M16	●	13	48	44	72	45	41	10
M18		●	14	48	44	72	45	41	11	1.4
M20		●	15	48	44	72	45	41	12	1.4
M22		●	17	48	44	72	45	41	13	1.4
M24		●	19	48	44	72	45	41	15	1.4
M27		●	20	48	44	72	45	41	15	1.4
M30		●	23	48	44	72	45	41	17	1.4
M33		●	25	48	44	72	45	41	19	1.4
M36		●	28	48	44	72	45	41	21	1.4

● : Stock item

DST (High speed synchro tapping chuck)

Code system

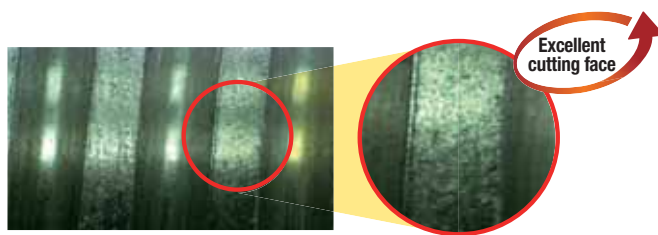
BT40	-	DST	-	22	-	100
Spindle		Tapping Holder		Max. Chucking dia.		Length

Features

- Tapping chuck for high speed machining
- Specially designed to absorb thrust load to provide tap damage prevention and a longer tool service life
- Internal coolant applicable
- Boring range : M1 ~ M22



Precise machining



[DST22]

(V=100 m/min)



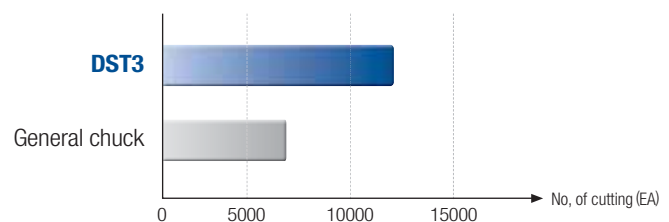
[Conventional one]



Tapping dedicated collet

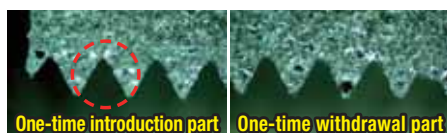
- In the case of tapping, it is recommended to use TER collet.
- DST3 : ER11 collet used

[M1.4x0.3 Life test]



» Increased tool service life versus collet chuck use

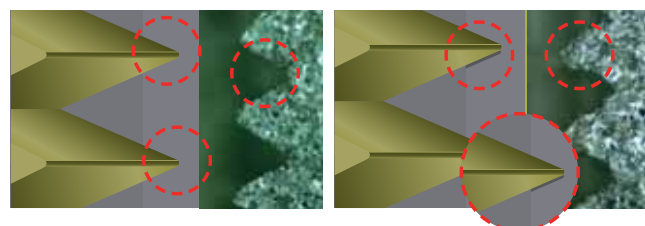
Comparison of Thread shape



[DST]



[General collet chuck]



[Synchro tap chuck (DST3)]

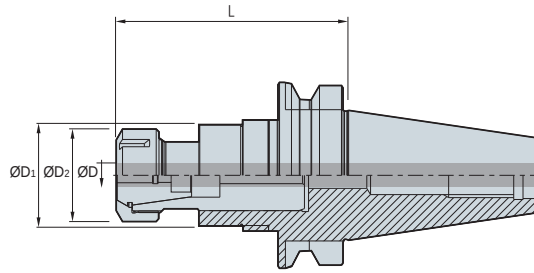
Clean thread shape without collapse

[General collet chuck]

Collapsed thread due to no adjustment for synchro error

BT-DST

High speed synchro tapping chuck



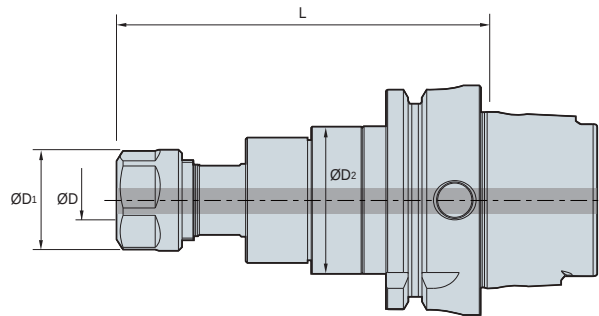
(mm)

Designation		Stock	ØD	ØD1	ØD2	L	Collet	F-	F+	Kg
BT30-	DST3-70	●	M1~M3	20	19	70	ER11	0.5	0.5	0.5
	DST10-100	●	M3~M10	40.4	28	100	TER16	0.5	0.5	0.8
BT40-	DST3-70	●	M1~M3	20	19	70	ER11	0.5	0.5	1.0
	DST10-100	●	M3~M10	40.4	28	100	TER16	0.5	0.5	1.3
	DST22-110	●	M6~M22	60	50	110	TER32	0.7	0.7	1.7
BT50-	DST10-11	●	M3~M10	60	50	110	TER16	0.5	0.5	3.8
	DST22-130	●	M6~M22	60	50	130	TER32	0.7	0.7	4.5

●: Stock item

HSK-DST

High speed synchro tapping chuck



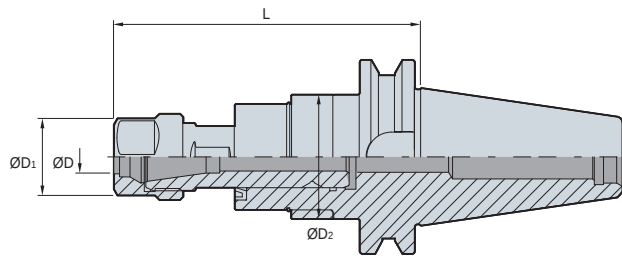
(mm)

Designation	Stock	ØD	ØD1	ØD2	L	Collet	F-	F+	Kg	
HSK63A-	DST3-80	●	M1~M3	19	20	80	ER11	0.5	0.5	0.7
	DST10-100	●	M3~M10	28	40.4	100	TER16	0.5	0.5	0.9
	DST22-130	●	M6~M22	50	60	130	TER32	0.7	0.7	1.8

●: Stock item

SK-DST

High speed synchro tapping chuck



(mm)

Designation		Stock	ØD	ØD1	ØD2	L	Collet	F-	F+	Kg
SK30-	DST3-70	●	M1~M3	19	20	70	ER11	0.2	0.2	0.4
SK40-	DST3-70	●	M1~M3	19	20	70	ER11	0.2	0.2	0.9
	DST10-110	●	M3~M10	28	35	110	TER16	0.5	0.5	1.2
	DST22-120	●	M6~M22	50	54	120	TER32	0.7	0.7	1.8
SK50-	DST10-110	●	M3~M10	28	35	110	TER16	0.5	0.5	3.0
	DST22-120	●	M6~M22	50	54	120	TER32	0.7	0.7	3.7

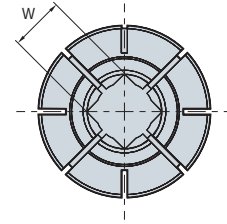
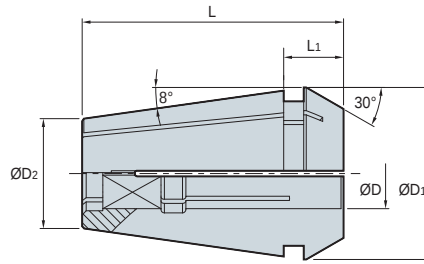
●: Stock item

Parts

Division	Basic		For separate purchase				Division	For separate purchase
	Nut		Spanner		ER/TER			Coolant tube for HSK
Parts							Parts	
Designation							Designation	
DST3	R11	-	S-17	-	GERC11/ER11-ØD	-	HSK50A	HSK50A-CNS
DST10	R16	-	S-25	-	-	TER16-ØD	HSK63A	HSK63A-CNS
DST22	-	RU32	-	48-52	-	TER32-ØD	HSK100A	HSK100A-CNS

TER

TER Collet



(mm)

Designation	Stock	Tapping range	ØD	ØD1	ØD2	L	L1	W	Kg
TER16-	4x3.2	● M3	4	16.74	10.1	27.5	6.3	3.2	0.03
	5x4	● M4	5	16.74	10.1	27.5	6.3	4	0.03
	5.5x4.5	● M5	5.5	16.74	10.1	27.5	6.3	4.5	0.02
	6x4.5	● M6, U1/4	6	16.74	10.1	27.5	6.3	4.5	0.02
	6.2x5	● M7, M8	6.2	16.74	10.1	27.5	6.3	5	0.02
	7x5.5	● M9, M10, U3/8	7	16.74	10.1	27.5	6.3	5.5	0.02
TER20-	5x4	● M4	5	20.74	13.2	31.5	7.2	4	0.05
	5.5x4.5	● M5	5.5	20.74	13.2	31.5	7.2	4.5	0.05
	6x4.5	● M6, U1/4	6	20.74	13.2	31.5	7.2	4.5	0.05
	6.2x5	● M7, M8	6.2	20.74	13.2	31.5	7.2	5	0.04
	7x5.5	● M9, M10, U3/8	7	20.74	13.2	31.5	7.2	5.5	0.05
	8x6	● M11, U7/16, P1/8	8	20.74	13.2	31.5	7.2	6	0.04
	8.5x6.5	● M12	8.5	20.74	13.2	31.5	7.2	6.5	0.04
TER25-	5x4	● M4	5	25.74	17.6	34	7.5	4	0.9
	5.5x4.5	● M5	5.5	25.74	17.6	34	7.5	4.5	0.8
	6x4.5	● M6	6	25.74	17.6	34	7.5	4.5	0.8
	6.2x5	● M7, M8	6.2	25.74	17.6	34	7.5	5	0.1
	7x5.5	● M9, M10, U3/8	7	25.74	17.6	34	7.5	5.5	0.8
	8.5x6.5	● M12	8.5	25.74	17.6	34	7.5	6.5	0.8
TER32-	6x4.5	● M6, U1/4	6.2	32.74	23.1	40	8.2	4.5	0.2
	6.2x5	● M7, M8	6.2	32.74	23.1	40	8.2	5	0.2
	7x5.5	● M9, M10, U3/8	7	32.74	23.1	40	8.2	5.5	0.2
	8x6	● M11, U7/16, P1/8	8	32.74	23.1	40	8.2	6	0.2
	8.5x6.5	● M12	8.5	32.74	23.1	40	8.2	6.5	0.2
	10.5x8	● M14, U9/16	10.5	32.74	23.1	40	8.2	8	0.2
	12.5x10	● M16	12.5	32.74	23.1	40	8.2	10	0.2
	9x7	● U1/2	9	32.74	23.1	40	8.2	7	0.2
	11x9	● P1/4	11	32.74	23.1	40	8.2	9	0.2
	12x9	● U5/8	12	32.74	23.1	40	8.2	9	0.2
	14x11	● M18, P3/8	14	32.74	23.1	40	8.2	11	0.1
	15x12	● M20	15	32.74	23.1	40	8.2	12	0.1
	17x13	● M22, U7/8	17	32.74	23.1	40	8.2	13	0.1

●: Stock item

TEH (Tap Extension Holder)

Code system

TEH	230	D6	J	-	M6	C
Tap Extension Holder	Length	Shank dia.	J : JIS Non : DIN		Tap size	C : Coolant Non : General

Features

- Product specialized for processing deep, narrow hole taps
- Excellent rigidity and stable runout thanks to a short incision unit
- Excellent economic efficiency in comparison with the general long tap
- Prevention of over clamping thanks to applied O-Ring
- Optimized for processing narrow, deep holes such as the hoel of an engine



Structure



Processing of deep holes



[TEH]

Processing O

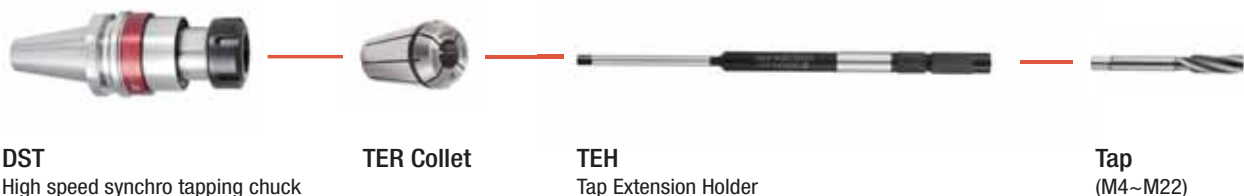
[General long Tap]

Processing X

Full length comparison	TEH	General long tap
M10	230mm	150mm
M22	330mm	200mm

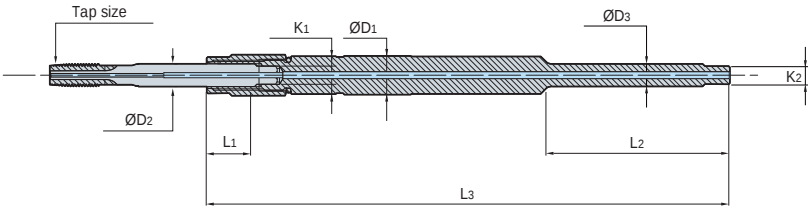
Since the full length is longer than that of the general long tap, it is afavorable for processing narrow, deep holes.

TEH Setting Method

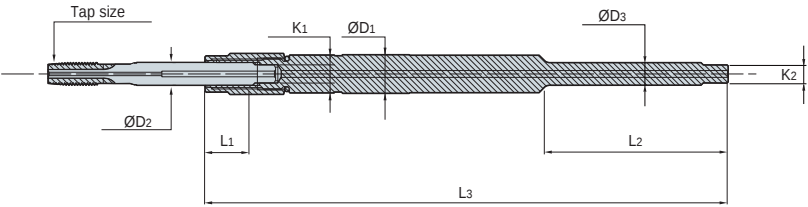


TEH

Tap Extension Holder



Pic.1



Pic.2

(mm)

Designation (JIS)		Stock	Tapping Range	ØD1	ØD2	ØD3	L1	L2	L3	K1	K2	Nut external diameter Ø	Pic.
TEH230	D5J-M4	●	M4	11	5	6	23	50	230	5	5	12.7	2
	D6J-M6C	●	M6	12	6	6	23	50	230	5	5	13.9	1
	D6.2J-M8C	●	M8	12	6.2	6.2	24	65	230	5	5	13.9	1
	D7J-M10C	●	M10	13	7	7	24	65	230	6	6	15	1
	D8.5J-M12C	●	M12	14	9	9	28	65	230	7	7	16	1
TEH330	D10.5J-M14C	●	M14	16	11	11	33	70	330	8	8	18	1
	D12.5J-M16C	●	M16	18	13	13	34	70	330	10	10	20	1
	D14J-M18C	●	M18	20	14	14	35	70	330	11	11	22	1
	D15J-M20C	●	M20	21	15	15	36	75	330	12	12	23	1
	D17J-M22C	●	M22	23	17	17	36	75	330	13	13	26	1

●: Stock item

(mm)

Designation (DIN)		Stock	Tapping Range	ØD1	ØD2	ØD3	L1	L2	L3	K1	K2	Nut external diameter Ø	Pic.
TEH230	D4.5-M4	●	M4	11	5	6	21	50	230	5	5	12	2
	D6-M6C	●	M6	12	6	7	25	50	230	6	6	13.9	1
	D8-M8C	●	M8	14	8	8	29	65	230	6.3	6.3	16	1
	D10-M10C	●	M10	16	10	10	32	65	230	8	8	18	1
	D9-M12C	●	M12	15	9	9	30	65	230	7	7	17	1
TEH330	D11-M14C	●	M14	17	11	11	35	70	330	9	9	19	1
	D12-M16C	●	M16	18	12	12	35	70	330	9	9	20	1
	D14-M18C	●	M18	20	14	14	39	70	330	11	11	22	1
	D16-M20C	●	M20	22	16	16	40	75	330	12	12	24	1
	D18-M22C	●	M22	24	18	18	43	75	330	15	15	26	1

●: Stock item

STER PAT. (DINE Synchro Tapping ER Collet)

Code system

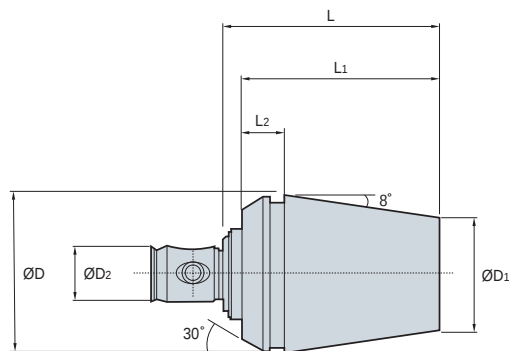
ST	ER	16	M6
Synchronizing Tapping collet	Tool ER: Collet	Collet size	Tap size

Features

- It is special ER collet that can minimize synchronizing error with general ER collet chuck
- Minimize synchronization error, improve thread precision
- Prevention of Tap damage and extension of tool life
- Improved thread tolerance
- For high-speed machining, use of a dedicated tap is recommended
- Optimized design in MCT with RIGID function



COLLET

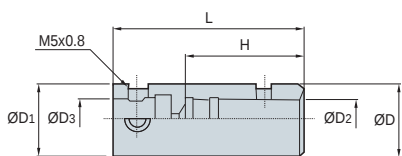


Designation	Stock	ØD	ØD ₁	ØD ₂	ØD ₃	L	L ₁	L ₂	Screw	Wrench
STER32	●	32	23.1	11	11	44	40	8.2	BTDD506F BTDD504	LW-2.5

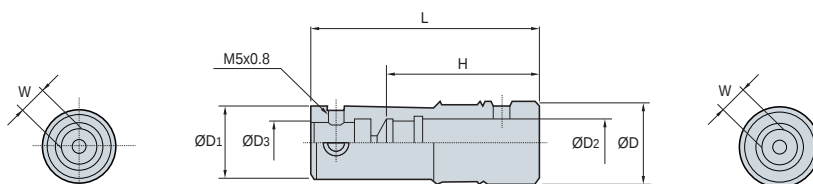
(mm)

●: Stock item

CONNECTOR



Pic.1



Pic.2

Designation	Stock	ØD	ØD ₁	ØD ₂	ØD ₃	L	H	W	Screw	Wrench	Pic.
STER32C- M6	●	19	21	6	11	50	29.5	4.5	BTDD506F BTDD504	LW-2.5	2
M8	●	19	21	6.2	11	50	30	5			2
M10	●	19	21	7	11	50	29	5.5			2
M12	●	19	21	8.5	11	50	30.5	6.5			2
M14	●	19	21	10.5	11	50	31	8			2
M16	●	19	21	12.5	11	50	40.5	10			2

(mm)

●: Stock item

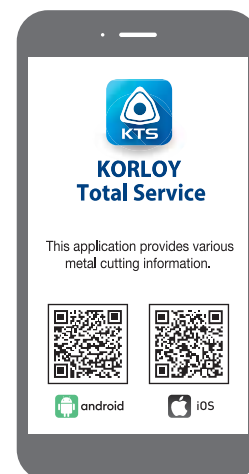
For the safe metalcutting

- Use safety supplies such as protective gloves to prevent possible injury while touching the edge of tools.
- Use safety glasses or safety cover to hedge possible dangers. Inappropriate usage or excessive cutting condition may lead tool's breakage or even the fragment's scattering.
- Clamp the workpiece tightly enough to prevent its movement while its machining.
- Properly manage the tool change phase because the inordinately used tool can be easily broken under the excessive cutting load or severe wear, and it may threat the operator's safety.
- Use safety cover because chips evacuated during cutting are hot and sharp and may cause burns and cuts. To remove chips safely, stop machining, put on protective gloves, and use a hook or other tools.
- Prepare for fire prevention measures as the use of the non-water soluble cutting oil may cause fire.
- Use safety cover and other safety supplies because the spare parts or the inserts can be pulled out due to centrifugal force while high speed machining.



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