

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

SP OX

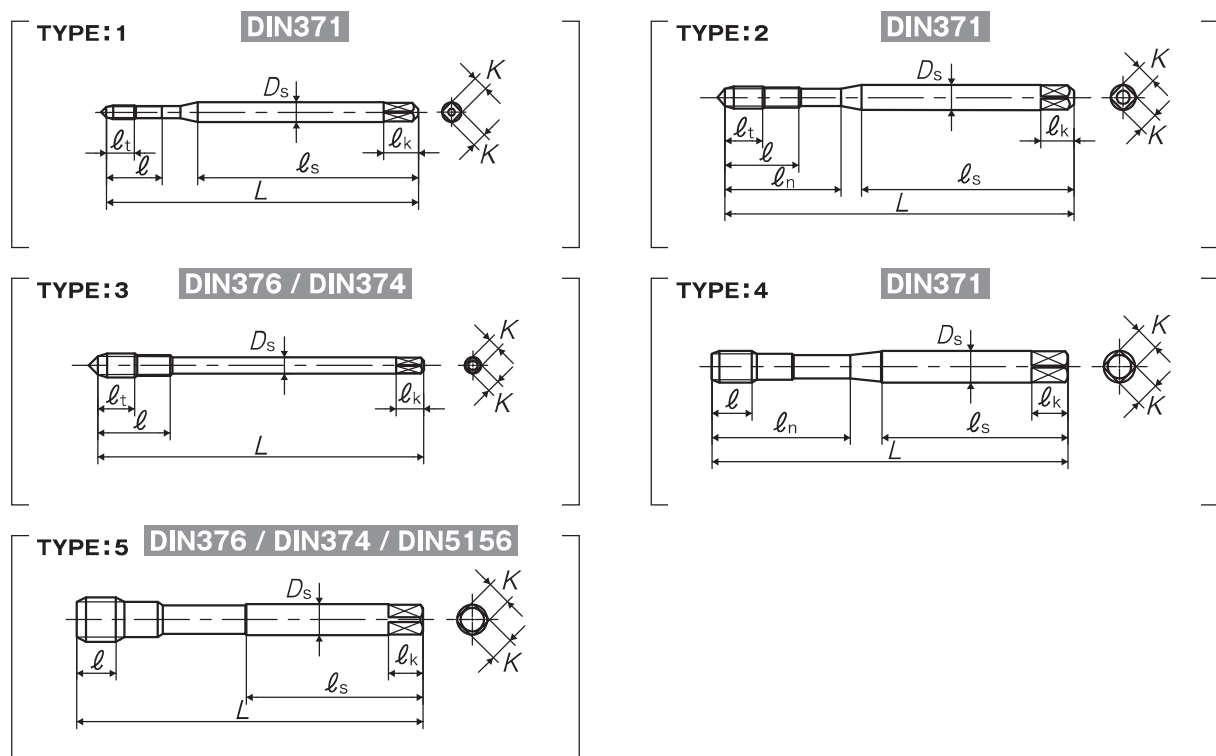
Spiral Fluted Taps, Oxidized Specification



Recommended Tapping Speeds depending on Materials

Free cutting and structural steel ISO P1 5~10 (m/min)	Carbon steel and low alloy steel ISO P2 5~10 (m/min)
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For icon explanation, refer to P.50



Spiral Fluted Taps
(for blind hole)

Spiral Fluted Taps
(for through hole)

Spiral Pointed Taps
(for through hole)

Hand Taps

Cemented
Carbide Taps

Roll Taps

Special Thread Taps
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools

Spiral Fluted Tap Series

SP OX Spiral Fluted Taps, Oxidized

Oversize
Segment : 1D

Overall length	Chamfer + full thread	Thread length	Thread+Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓt	ℓ	ℓn	ℓs	Ds	K	ℓk

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
For Metric Threads														
M2 × 0.4	ISO2	SD2.0EANEX	2.5P	45	4	8	-	32	2.8	2.1	5	2	1	
M2.2 × 0.45	ISO2	SD2.2FANEX	2.5P	45	4	9	-	32	2.8	2.1	5	2	1	
M2.3 × 0.4	ISO2	SD2.3EANEX	2.5P	45	4	9	-	32	2.8	2.1	5	2	1	
M2.5 × 0.45	ISO2	SD2.5FANEX	2.5P	50	4	8	15	33	2.8	2.1	5	2	2	
M2.6 × 0.45	ISO2	SD2.6FANEX	2.5P	50	4	8	15	33	2.8	2.1	5	2	2	
M3 × 0.5	ISO2	SD3.0GANEX	2.5P	56	5	9	18	34	3.5	2.7	6	3	2	
	ISO3	SD3.0GMNEX	2.5P	56	5	9	18	34	3.5	2.7	6	3	2	
M3.5 × 0.6	ISO2	SD3.5HANEX	2.5P	56	7	11	20	32	4	3	6	2	2	
M4 × 0.7	ISO2	SD4.0IANEX	2.5P	63	7	13	21	38	4.5	3.4	6	3	2	
		SG4.0IANEX	2.5P	63	7	13	-	-	2.8	2.1	5	3	3	
	ISO3	SD4.0IMNEX	2.5P	63	7	13	21	38	4.5	3.4	6	3	2	
M4 × 0.5	ISO2	SM4.0GANEX	2.5P	63	5	9	-	-	2.8	2.1	5	3	3	●
M4.5 × 0.75	ISO2	SD4.5JANEX	2.5P	70	9	14	24	39	6	4.9	8	3	2	
M5 × 0.8	ISO2	SD5.0KANEX	2.5P	70	9	14	25	39	6	4.9	8	3	2	
		SG5.0KANEX	2.5P	70	9	14	-	-	3.5	2.7	6	3	3	
	ISO3	SD5.0KMNEX	2.5P	70	9	14	25	39	6	4.9	8	3	2	
M5 × 0.5	ISO2	SM5.0GANEX	2.5P	70	6	11	-	-	3.5	2.7	6	3	3	●
M6 × 1	ISO2	SD6.0MANEX	2.5P	80	11	15	30	45	6	4.9	8	3	2	
		SG6.0MANEX	2.5P	80	11	15	-	-	4.5	3.4	6	3	3	
	ISO3	SD6.0MMNEX	2.5P	80	11	15	30	45	6	4.9	8	3	2	
M6 × 0.75	ISO2	SM6.0JANEX	2.5P	80	8	13	-	-	4.5	3.4	6	3	3	●
M6 × 0.5	ISO2	SM6.0GANEX	2.5P	80	8	13	-	-	4.5	3.4	6	3	3	●
M7 × 1	ISO2	SD7.0MANEX	2.5P	80	-	11	30	45	7	5.5	8	3	4	
M7 × 0.75	ISO2	SM7.0JANEX	2.5P	80	-	8	-	41	5.5	4.3	7	3	5	
M7 × 0.5	ISO2	SM7.0GANEX	2.5P	80	-	8	-	41	5.5	4.3	7	3	5	
M8 × 1.25	ISO2	SD8.0NANEX	2.5P	90	-	12	35	47	8	6.2	9	3	4	
		SG8.0NANEX	2.5P	90	-	12	-	46	6	4.9	8	3	5	
	ISO3	SD8.0NMNEX	2.5P	90	-	12	35	47	8	6.2	9	3	4	
M8 × 1	ISO2	SM8.0MANEX	2.5P	90	-	12	-	46	6	4.9	8	3	5	●
M8 × 0.75	ISO2	SM8.0JANEX	2.5P	80	-	12	-	41	6	4.9	8	3	5	●
M8 × 0.5	ISO2	SM8.0GANEX	2.5P	80	-	12	-	41	6	4.9	8	3	5	●
M9 × 1.25	ISO2	SD9.0NANEX	2.5P	90	-	12	35	48	9	7	10	3	4	
	ISO2	SM9.0NANEX	2.5P	90	-	12	-	46	7	5.5	8	3	5	
M9 × 1	ISO2	SM9.0MANEX	2.5P	90	-	12	-	46	7	5.5	8	3	5	
M10 × 1.5	ISO2	SD0100ANEX	2.5P	100	-	13	39	52	10	8	11	3	4	
		SG0100ANEX	2.5P	100	-	13	-	51	7	5.5	8	3	5	
	ISO3	SD0100MNEX	2.5P	100	-	13	39	52	10	8	11	3	4	
M10 × 1.25	ISO2	SM010NANEX	2.5P	100	-	13	-	51	7	5.5	8	3	5	●
M10 × 1	ISO2	SM010MANEX	2.5P	90	-	13	-	46	7	5.5	8	3	5	●
M10 × 0.75	ISO2	SM010JANEX	2.5P	90	-	13	-	46	7	5.5	8	3	5	●
M11 × 1.5	ISO2	SM0110ANEX	2.5P	100	-	13	-	51	8	6.2	9	3	5	
M12 × 1.75	ISO2	SG012PANEX	2.5P	110	-	15	-	56	9	7	10	3	5	
	ISO3	SG012PMNEX	2.5P	110	-	15	-	56	9	7	10	3	5	
M12 × 1.5	ISO2	SM0120ANEX	2.5P	100	-	15	-	51	9	7	10	3	5	●
M12 × 1.25	ISO2	SM012NANEX	2.5P	100	-	15	-	51	9	7	10	3	5	●
M12 × 1	ISO2	SM012MANEX	2.5P	100	-	15	-	51	9	7	10	3	5	●

SP OX Spiral Fluted Taps, Oxided

Overall length	Chamfer + full thread	Thread length	Thread+Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓt	ℓ	ℓn	ℓs	Ds	K	ℓk

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M14 × 2	IS02	SG014QANEX	2.5P	110	-	18	-	56	11	9	12	3	5	
	IS03	SG014QMEX	2.5P	110	-	18	-	56	11	9	12	3	5	
M14 × 1.5	IS02	SM014OANEX	2.5P	100	-	14	-	51	11	9	12	3	5	●
M14 × 1.25	IS02	SM014NANEX	2.5P	100	-	14	-	51	11	9	12	3	5	●
M14 × 1	IS02	SM014MANEX	2.5P	100	-	14	-	51	11	9	12	3	5	●
M16 × 2	IS02	SG016QANEX	2.5P	110	-	18	-	56	12	9	12	3	5	
	IS03	SG016QMEX	2.5P	110	-	18	-	56	12	9	12	3	5	
M16 × 1.5	IS02	SM016OANEX	2.5P	100	-	14	-	51	12	9	12	3	5	●
M16 × 1	IS02	SM016MANEX	2.5P	100	-	14	-	51	12	9	12	3	5	●
M18 × 2.5	IS02	SG018RANEX	2.5P	125	-	20	-	64	14	11	14	4	5	
M18 × 2	IS02	SM018QANEX	2.5P	125	-	18	-	64	14	11	14	4	5	●
M18 × 1.5	IS02	SM018OANEX	2.5P	110	-	14	-	56	14	11	14	4	5	●
M18 × 1	IS02	SM018MANEX	2.5P	110	-	14	-	56	14	11	14	4	5	●
M20 × 2.5	IS02	SG020RANEX	2.5P	140	-	20	-	71	16	12	15	4	5	
M20 × 2	IS02	SM020QANEX	2.5P	140	-	18	-	71	16	12	15	4	5	●
M20 × 1.5	IS02	SM020OANEX	2.5P	125	-	14	-	64	16	12	15	4	5	●
M20 × 1	IS02	SM020MANEX	2.5P	125	-	14	-	64	16	12	15	4	5	●
M22 × 2.5	IS02	SG022RANEX	2.5P	140	-	20	-	71	18	14.5	17	4	5	
M22 × 2	IS02	SM022QANEX	2.5P	140	-	18	-	71	18	14.5	17	4	5	●
M22 × 1.5	IS02	SM022OANEX	2.5P	125	-	14	-	64	18	14.5	17	4	5	●
M22 × 1	IS02	SM022MANEX	2.5P	125	-	14	-	64	18	14.5	17	4	5	●
M24 × 3	IS02	SG024SANEX	2.5P	160	-	25	-	82	18	14.5	17	4	5	
M24 × 2	IS02	SM024QANEX	2.5P	140	-	18	-	71	18	14.5	17	4	5	●
M24 × 1.5	IS02	SM024OANEX	2.5P	140	-	18	-	71	18	14.5	17	4	5	●
M24 × 1	IS02	SM024MANEX	2.5P	140	-	18	-	71	18	14.5	17	4	5	●
M25 × 1.5	IS02	SM025OANEX	2.5P	140	-	18	-	71	18	14.5	17	4	5	●
M26 × 1.5	IS02	SM026OANEX	2.5P	140	-	18	-	71	18	14.5	17	4	5	●
M27 × 3	IS02	SG027SANEX	2.5P	160	-	25	-	82	20	16	19	4	5	
M27 × 2	IS02	SM027QANEX	2.5P	140	-	20	-	71	20	16	19	4	5	●
M27 × 1.5	IS02	SM027OANEX	2.5P	140	-	20	-	71	20	16	19	4	5	●
M27 × 1	IS02	SM027MANEX	2.5P	140	-	20	-	71	20	16	19	4	5	
M28 × 2	IS02	SM028QANEX	2.5P	140	-	20	-	71	20	16	19	4	5	●
M28 × 1.5	IS02	SM028OANEX	2.5P	140	-	20	-	71	20	16	19	4	5	●
M28 × 1	IS02	SM028MANEX	2.5P	140	-	20	-	71	20	16	19	4	5	
M30 × 3.5	IS02	SG030TANEX	2.5P	180	-	30	-	92	22	18	21	4	5	
M30 × 2	IS02	SM030QANEX	2.5P	150	-	20	-	77	22	18	21	4	5	●
M30 × 1.5	IS02	SM030OANEX	2.5P	150	-	20	-	77	22	18	21	4	5	●
M30 × 1	IS02	SM030MANEX	2.5P	150	-	20	-	77	22	18	21	4	5	
M32 × 2	IS02	SM032QANEX	2.5P	150	-	20	-	77	22	18	21	4	5	
M32 × 1.5	IS02	SM032OANEX	2.5P	150	-	20	-	77	22	18	21	4	5	●
M32 × 1	IS02	SM032MANEX	2.5P	150	-	20	-	77	22	18	21	4	5	
M33 × 3.5	IS02	SG033TANEX	2.5P	180	-	30	-	92	25	20	23	4	5	
M33 × 2	IS02	SM033QANEX	2.5P	160	-	20	-	82	25	20	23	4	5	●
M33 × 1.5	IS02	SM033OANEX	2.5P	160	-	20	-	82	25	20	23	4	5	
M33 × 1	IS02	SM033MANEX	2.5P	160	-	20	-	82	25	20	23	4	5	
M35 × 1.5	IS02	SM035OANEX	2.5P	170	-	20	-	87	28	22	25	4	5	●
M36 × 4	IS02	SG036UANEX	2.5P	200	-	40	-	102	28	22	25	4	5	
M36 × 3	IS02	SM036SANEX	2.5P	200	-	30	-	102	28	22	25	4	5	●
M36 × 2	IS02	SM036QANEX	2.5P	170	-	20	-	87	28	22	25	4	5	●
M36 × 1.5	IS02	SM036OANEX	2.5P	170	-	20	-	87	28	22	25	4	5	●

Spiral Fluted Taps
(for blind hole)

Spiral Fluted Taps
(for through hole)

Spiral Pointed Taps
(for through hole)

Hand Taps

Cemented
Carbide Taps

Roll Taps

Special Thread Taps
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools

Spiral Fluted Tap Series

SP OX Spiral Fluted Taps, Oxidized

Overall length	Chamfer + full thread	Thread length	Thread+Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓt	ℓ	ℓn	ℓs	Ds	K	ℓk

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
M36 × 1	ISO2	SM036MANEX	2.5P	170	-	20	-	87	28	22	25	4	5	
M39 × 4	ISO2	SG039UANEX	2.5P	200	-	40	-	102	32	24	27	4	5	
M39 × 2	ISO2	SM039QANEX	2.5P	170	-	20	-	87	32	24	27	4	5	
M39 × 1.5	ISO2	SM039OANEX	2.5P	170	-	20	-	87	32	24	27	4	5	
M39 × 1	ISO2	SM039MANEX	2.5P	170	-	20	-	87	32	24	27	4	5	
M42 × 4.5	ISO2	SG042VANEX	2.5P	200	-	40	-	102	32	24	27	4	5	
M42 × 2	ISO2	SM042QANEX	2.5P	170	-	20	-	87	32	24	27	4	5	
M42 × 1.5	ISO2	SM042OANEX	2.5P	170	-	20	-	87	32	24	27	4	5	
M42 × 1	ISO2	SM042MANEX	2.5P	170	-	20	-	87	32	24	27	4	5	
M45 × 4.5	ISO2	SG045VANEX	2.5P	220	-	45	-	112	36	29	32	4	5	
M45 × 3	ISO2	SM045SANEX	2.5P	200	-	40	-	102	36	29	32	4	5	
M45 × 2	ISO2	SM045QANEX	2.5P	180	-	25	-	92	36	29	32	4	5	
M45 × 1.5	ISO2	SM045OANEX	2.5P	180	-	25	-	92	36	29	32	4	5	
M45 × 1	ISO2	SM045MANEX	2.5P	180	-	25	-	92	36	29	32	4	5	
M48 × 5	ISO2	SG048WANEX	2.5P	250	-	45	-	128	36	29	32	4	5	
M48 × 3	ISO2	SM048SANEX	2.5P	225	-	40	-	115	36	29	32	4	5	
M48 × 2	ISO2	SM048QANEX	2.5P	190	-	25	-	97	36	29	32	4	5	
M48 × 1.5	ISO2	SM048OANEX	2.5P	190	-	25	-	97	36	29	32	4	5	
M48 × 1	ISO2	SM048MANEX	2.5P	190	-	25	-	97	36	29	32	4	5	
Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
For Unified Threads														
No.4-40UNC	2B	SDUN4HXNEX	2.5P	56	5	9	18	34	3.5	2.7	6	2	2	
No.4-48UNF	2B	SDUN4FXNEX	2.5P	56	5	9	18	34	3.5	2.7	6	2	2	
No.5-40UNC	2B	SDUN5HXNEX	2.5P	56	5	11	18	34	3.5	2.7	6	2	2	
No.5-44UNF	2B	SDUN5GXNEX	2.5P	56	5	11	18	34	3.5	2.7	6	2	2	
No.6-32UNC	2B	SDUN6JXNEX	2.5P	56	7	11	19	32	4	3	6	3	2	
No.6-40UNF	2B	SDUN6HXNEX	2.5P	56	7	11	19	32	4	3	6	3	2	
No.8-32UNC	2B	SDUN8JXNEX	2.5P	63	7	13	21	38	4.5	3.4	6	3	2	
No.8-36UNF	2B	SDUN8IXNEX	2.5P	63	7	13	21	38	4.5	3.4	6	3	2	
No.10-24UNC	2B	SDUNAMXNEX	2.5P	70	9	14	24	39	6	4.9	8	3	2	
No.10-32UNF	2B	SDUNAJXNEX	2.5P	70	9	14	24	39	6	4.9	8	3	2	
No.12-24UNC	2B	SDUNCMXNEX	2.5P	80	9	15	28	45	6	4.9	8	3	2	
No.12-28UNF	2B	SDUNCXNEX	2.5P	80	9	15	28	45	6	4.9	8	3	2	
1/4-20UNC	2B	SDU04NXNEX	2.5P	80	11	15	30	42	7	5.5	8	3	2	
1/4-28UNF	2B	SDU04KXNEX	2.5P	80	11	15	30	42	7	5.5	8	3	2	
5/16-18UNC	2B	SDU05OXNEX	2.5P	90	-	12	35	47	8	6.2	9	3	4	
5/16-24UNF	2B	SMU05MXNEX	2.5P	90	-	12	-	46	6	4.9	8	3	5	
3/8-16UNC	2B	SDU06PXNEX	2.5P	100	-	13	39	54	9	7	10	3	4	
3/8-24UNF	2B	SMU06MXNEX	2.5P	100	-	13	-	51	7	5.5	8	3	5	
7/16-14UNC	2B	SGU07QXNEX	2.5P	100	-	13	-	51	8	6.2	9	3	5	
7/16-20UNF	2B	SMU07NXNEX	2.5P	100	-	13	-	51	8	6.2	9	3	5	
1/2-13UNC	2B	SGU08RXNEX	2.5P	110	-	15	-	56	9	7	10	3	5	
1/2-20UNF	2B	SMU08NXNEX	2.5P	100	-	15	-	51	9	7	10	3	5	
9/16-12UNC	2B	SGU09SXNEX	2.5P	110	-	18	-	56	11	9	12	3	5	
9/16-18UNF	2B	SMU09OXNEX	2.5P	100	-	14	-	51	11	9	12	3	5	
5/8-11UNC	2B	SGU10UXNEX	2.5P	110	-	18	-	56	12	9	12	3	5	
5/8-18UNF	2B	SMU10OXNEX	2.5P	100	-	14	-	51	12	9	12	3	5	
3/4-10UNC	2B	SGU12VXNEX	2.5P	125	-	20	-	64	14	11	14	4	5	
3/4-16UNF	2B	SMU12PXNEX	2.5P	110	-	14	-	56	14	11	14	4	5	
7/8-9UNC	2B	SGU14WXNEX	2.5P	140	-	20	-	71	18	14.5	17	4	5	

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DIN
SP-11

SP OX Spiral Fluted Taps, Oxided

Overall length	Chamfer + full thread	Thread length	Thread+Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓt	ℓ	ℓn	ℓs	Ds	K	ℓk

Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
7/8-14UNF	2B	SMU14QXNEX	2.5P	125	-	20	-	64	18	14.5	17	4	5	
1-8UNC	2B	SGU16XXNEX	2.5P	160	-	25	-	82	18	14.5	17	4	5	
1-12UNF	2B	SMU16SXNEX	2.5P	140	-	18	-	71	18	14.5	17	4	5	
1 1/8-7UNC	2B	SGU18YXNEX	2.5P	180	-	30	-	92	22	18	21	4	5	
1 1/8-12UNF	2B	SMU18SXNEX	2.5P	150	-	20	-	77	22	18	21	4	5	
1 1/4-7UNC	2B	SGU20YXNEX	2.5P	180	-	30	-	92	22	18	21	4	5	
1 1/4-12UNF	2B	SMU20SXNEX	2.5P	150	-	20	-	77	22	18	21	4	5	
1 3/8-6UNC	2B	SGU22ZXNEX	2.5P	200	-	40	-	102	28	20	23	4	5	
1 3/8-12UNF	2B	SMU22SXNEX	2.5P	170	-	20	-	87	28	20	23	4	5	
1 1/2-6UNC	2B	SGU24ZXNEX	2.5P	200	-	40	-	102	32	24	27	4	5	
1 1/2-12UNF	2B	SMU24SXNEX	2.5P	170	-	20	-	87	32	24	27	4	5	
1 3/4-5UNC	2B	SGU287XNEX	2.5P	220	-	45	-	112	36	29	32	4	5	
1 3/4-12UN	2B	SMU28SXNEX	2.5P	180	-	20	-	92	36	29	32	4	5	
Size	Class	Code	Chamfer	L (mm)	ℓt (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Type	Stock
For G Threads														
G1/16-28	-	SVG0010NEX	2.5P	90	-	12	-	46	6	4.9	8	3	5	●
G1/8-28	-	SVG0020NEX	2.5P	90	-	12	-	46	7	5.5	8	3	5	●
G1/4-19	-	SVG0040NEX	2.5P	100	-	14	-	51	11	9	12	3	5	●
G3/8-19	-	SVG0060NEX	2.5P	100	-	14	-	51	12	9	12	3	5	●
G1/2-14	-	SVG0080NEX	2.5P	125	-	18	-	64	16	12	15	4	5	●
G5/8-14	-	SVG0100NEX	2.5P	125	-	18	-	64	18	14.5	17	4	5	●
G3/4-14	-	SVG0120NEX	2.5P	140	-	20	-	71	20	16	19	4	5	●
G7/8-14	-	SVG0140NEX	2.5P	150	-	20	-	77	22	18	21	4	5	
G1-11	-	SVG0160NEX	2.5P	160	-	20	-	82	25	20	23	4	5	●
G1 1/8-11	-	SVG0180NEX	2.5P	170	-	20	-	87	28	22	25	4	5	
G1 1/4-11	-	SVG0200NEX	2.5P	170	-	20	-	87	32	24	27	4	5	●
G1 1/2-11	-	SVG0240NEX	2.5P	190	-	25	-	97	36	29	32	4	5	●

Spiral Fluted Taps
(for blind hole)

Spiral Fluted Taps
(for through hole)

Spiral Pointed Taps
(for through hole)

Hand Taps

Cemented
Carbide Taps

Roll Taps

Special Thread Taps
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools