

		Actual size (.XX mm)		Sizes are standard commercially available drill sizes. (Predominantly Inch sizes.)											
	Thread	Max O.D.		Tap Drill 50%			Tap Drill 75%			Clearance Hole Size			Close Fit Hole size		
		Inch	mm	Inch	SAE Drill	Nearest Metric Drill	Inch	SAE Drill	Nearest Metric Drill	Inch	SAE Drill	Nearest Metric Drill	Inch	SAE Drill	Nearest Metric Drill
SAE NF	000-120	0.0340	.864 mm	0.0280	#70	.72 mm	0.0260	#71	.68 mm	0.0410	#59	1.05 mm	0.0350	#65	.90 mm
	00-90	0.0440	1.12 mm	0.0390	#61	1.00 mm	0.0360	64	.92 mm	0.0520	#55	1.30 mm	0.0453	#56	1.15 mm
	0-80	0.0600	1.5 2mm	0.0520	#55	1.30 mm	0.0469	3/64"	1.20 mm	0.0700	50	1.75 mm	0.0635	52	1.60 mm
METRIC	M1 x .25	0.0390	1.00 mm				0.0293	#69	.75 mm	0.0465	#56	1.15 mm	0.0420	#55	1.05 mm
	M1.1 x .25	0.0430	1.10 mm				0.0330	#66	.85 mm	0.0520	#56	1.15 mm	0.0469	3/64"	1.20 mm
	M1.2 x .25	0.0472	1.20 mm				0.0370	#63	.95 mm	0.0550	#54	1.40 mm	0.0469	3/64"	1.20 mm
	M1.4 x .3	0.0551	1.40 mm				0.0430	#57	1.10 mm	0.0610	1/16"	1.55 mm	0.0595	#53	1.15 mm
	M1.5 x .35	0.0591	1.50 mm	0.0520	#55	1.25 mm	0.0465	#56	1.15 mm	0.0700	#50	1.75 mm	0.0625	1/16"	1.60 mm
	M1.6 x .35	0.0630	1.60 mm	0.0550	#54	1.35 mm	0.0520	#55	1.25 mm	0.0700	#50	1.75 mm	0.0670	#51	1.65 mm
	M1.7 x .35	0.0669	1.70 mm	0.0550	#54	1.35 mm	0.0520	#55	1.25 mm	0.0785	#47	2.00 mm	0.0730	#49	1.85 mm
	M1.8 X .35	0.0709	1.80 mm	0.0595	#53	1.50 mm	0.0595	#53	1.50 mm	0.0810	#46	2.05 mm	0.0730	#49	1.85 mm
USS NC	1-64			0.0625	1/16"										
SAE NF	1-72	0.0728	1.85 mm	0.0635	#52	1.60 mm	0.0595	#53	1.50 mm	0.0810	#46	2.05 mm	0.0760	#48	1.95 mm
METRIC	M2 X .45			0.0670	#51	1.70 mm									
	M2 x .40	0.0787	2.00 MM	0.0700	#50	1.80 mm	0.0625	1/16"	1.60 mm	0.0890	#43	2.25 mm	0.0820	#45	2.10 mm
USS NC	2-56			0.0730	#49	1.85 mm									
SAE NF	2-64	0.0860	2.18 mm	0.0760	#48	1.95 mm	0.0700	#50	1.75 mm	0.0960	41	2.45 mm	0.0935	42	2.40 mm
METRIC	M2.5 X .45	0.0984	2.50 mm	0.0860	#44	2.20 mm	0.0810	#46	2.05 mm	0.1100	#35	2.80 mm	0.1015	#38	2.80 mm
USS NC	3-48			0.0860	#44	2.20 mm	0.0785	#47	2.00 mm						
SAE NF	3-56	0.0990	2.51 mm	0.0890	#43	2.25 mm	0.0820	#45	2.10 mm	0.1065	#36	2.70 mm	0.1040	#37	2.65 mm
USS NC	4-40			0.0960	#41	2.45 mm	0.0890	#43	2.50 mm						
SAE NF	4-48	0.1120	2.84 mm	0.0980	#40	2.50 mm	0.0935	#42	2.40 mm	0.1285	#30	3.30 mm	0.1160	#32	2.95 mm
METRIC	M3 X .6			0.1040	#37	2.65 mm	0.0960	#41	2.45 mm						
	M3 X .5	0.1181	3.0 mm	0.1065	#36	2.70 mm	0.0995	#39	2.55 mm	0.1285	#30	3.30 mm	0.1200	#31	3.10 mm
USS NC	5-40			0.1090	7/64"	2.80 mm									
SAE NF	5-44	0.1250	3.17 mm	0.1100	#35		0.1015	#38	2.60 mm	0.1360	#29	3.50 mm	0.1285	#30	3.30 mm
MODEL	1/8-56 MPT	0.1250	3.17 mm	Not Recommended			0.0980	#40	2.50 mm	0.1360	#29	3.50 mm	0.1285	#30	3.30 mm
USS NC	6-32			0.1160	#32	2.95 mm	0.1065	#36	2.70 mm						
SAE NF	6-40	0.1380	3.60 mm	0.1200	#31	3.10 mm	0.1130	#33	2.90 mm	0.1495	#25	3.80 mm	0.1440	#27	3.60 mm
METRIC	M3.5 X .6	0.1378	3.50 mm	0.1200	#31	3.10 mm	0.1160	#32	2.95 mm	0.1470	#26	3.70 mm	0.1405	#28	3.7 mm
	M4 X .75	0.1575	4.00 mm	0.1405	#28	3.30 mm	0.1285	#30	3.30 mm	0.1695	#18	4.43 mm	0.1660	#19	4.2 mm
MODEL	5/32-48 MPT	0.1560	3.96 mm	Not Recommended			0.1285	#30	3.50 mm	0.1719	11/64"	4.40 mm	0.1590	#20	4.10 mm
USS NC	8-32			0.1440	#27	3.70 mm									
SAE NF	8-36	0.1640	3.71mm	0.1470	#26	3.80 mm	0.1360	#29	3.50 mm	0.1770	#16	4.50 mm	0.1730	#17	4.40 mm
METRIC	M4.5 X .75	0.1772	4.50 mm	0.1570	#22	4.00 mm	0.1495	#25	3.80 mm	0.1910	#11	4.80 mm	0.1820	#14	4.60 mm

	Thread	Actual size (.XX mm)		Tap Drill 50%			Sizes are standard commercially available drill sizes. (Predominantly Inch sizes.)								
		Max O.D.		Tap Drill 50%			Tap Drill 75%			Clearance Hole Size			Close Fit Hole size		
		Inch	mm	Inch	SAE Drill	Metric Drill	Inch	SAE Drill	Metric Drill	Inch	SAE Drill	Metric Drill	Inch	SAE Drill	Metric Drill
MODEL	3/16-40 MPT	0.1875	4.76	Not Recommended			0.1540	#23	.390 mm	0.2040	#6	4.50 mm	0.1850	#13	4.70 mm
USS NC	10-24	0.1900	4.83 mm	0.1610	#20	4.10 mm	0.1610	#20	4.10 mm	0.2040	#6	5.20 mm	0.1935	#10	5.00 mm
SAE NF	10-32			0.1700	#18	4.30 mm	0.1590	#21							
METRIC	M5 X 1.0			0.1719	11/64"	4.40 mm	0.1590	#21	4.10 mm				0.1770	#16	4.50 mm
	M5 X .9	0.1969	5.00 mm	0.1730	#17	4.40 mm	0.1610	#20	4.10 mm	0.1850	#13	4.70 mm			
	M5 X .8			0.1770	#16	4.50 mm	0.1660	#19	4.20 mm						
USS NC	12-24	0.2160	5.49 mm	0.1890	#12	4.80 mm	0.1770	#16	4.50 mm	0.2280	#1	5.80 mm	0.2210	#2	5.60 mm
SAE NF	12-28			0.1935	#10	5.00 mm	0.1820	#14	4.70 mm						
METRIC	M6 X 1.0	0.2362	6.00 mm	0.2090	#4	5.30 mm	0.1990	#8	5.10 mm	0.2570	F	6.50 mm	0.2420	C	6.20 mm
	M6 X .75			0.2187	7/32"	5.50 mm	0.2090	#4	5.30 mm						
USS NC	1/4-20	0.2500	6.35 mm	0.2187	7/32"	5.50 mm	0.2010	#7	5.30 mm	0.2656	17/64"	6.80 mm	0.2570	F	6.40 mm
SAE NF	1/4-24			0.2280	#1	5.80 mm	0.2130	#3	5.40 mm						
MODEL	1/4-40 MPT	0.2500	6.35 mm	Not Recommended			0.2055	#5	5.20 mm	0.2656	17/64"	6.80 mm	0.2570	F	6.40 mm
METRIC	M7 X 1.0	0.2756	7.00 mm	0.2500	E - 1/4"	6.40 mm	0.2380	B	6.00 mm	0.3020	L	7.70 mm	0.2810	K	7.20 mm
	M7 X .75			0.2570	F	6.50 mm	0.2460	D	6.30 mm						
USS NC	5/16-18	0.3125	7.90 mm	0.2770	J	7.00 mm	0.2570	F	6.50 mm	0.3320	Q	8.50 mm	0.3230	P	8.20 mm
SAE NF	5/16-24			0.2812	9/32"	7.20 mm	0.2720	I	6.90 mm						
MODEL	5/16-27 MPT	0.3125	7.94 mm	Not Recommended			0.2570	F	6.40 mm	0.3320	Q	8.50 mm	0.3230	P	8.20 mm
METRIC	M8 X 1.25	0.3150	8.00 mm	0.2770	J	7.00 mm	0.2660	H	6.80 mm	0.3281	21/64"	8.20 mm	0.3230	P	8.20 mm
	M8 X 1.0			0.2900	L	7.40 mm	0.2770	J	7.00 mm						
	M9 X 1.25	0.3543	9.00 mm	0.3230	P	8.20 mm	0.3020	N	8.20 mm	0.3750	3/8"	9.50 mm	0.3680	U	9.40 mm
	M9 X 1.0			0.3281	21/64"	8.10 mm	0.3160	O	8.00 mm						
USS NC	3/8-16	0.3750	9.53 mm	0.3320	Q	8.50 mm	0.3125	5/16"	8.00 mm	0.3970	X	10.10 mm	0.3770	V	9.60 mm
SAE NF	3/8-24			0.3480	S	8.80 mm	0.3320	Q	8.50 mm						
METRIC	M10 X 1.5			0.3580	T	9.10 mm	0.3390	R	8.60 mm						
	M10 X 1.25	0.3937	10.00 mm	0.3594	23/64"	9.10 mm	0.3437	11/32"	8.70 mm	0.4219	27/64"	10.70 mm	0.4130	Z	10.50 mm
	M10 X 1.0			0.3680	U	9.40 mm	0.3580	T	9.10 mm						
	M11 X 1.5	0.4331	11	0.3970	X	10.00 mm	0.3750	3/8"	9.50 mm	0.4687	15/32"	11.90 mm	0.4531	29/64"	11.60 mm
USS NC	7/16-14	0.4375	11.11 mm	0.3906	25/64"	9.90 mm	0.3680	U	9.40 mm	0.4687	15/32"	11.90 mm	0.4531	29/64"	11.40 mm
SAE NF	7/16-20			0.4062	13/32"	10.30 mm	0.3906	25/64"	9.90 mm						
METRIC	M12 X 1.75			0.4219	27/64"	10.70 mm	0.4062	13/32"	10.30 mm						
	M12 X 1.5	.4724 mm	12.00 mm	0.4375	7/16"	10.80 mm	0.4130	Z	10.50 mm	0.5000	1/2"	12.70 mm	0.4375	7/16"	11.10 mm
	M12 X 1.25						0.4219	27/64"	10.70 mm						
USS NC	1/2-13	0.5000	12.70 mm	0.4531	29/64"	11.50 mm	0.4219	27/64"	10.70 mm	0.5312	17/32"	13.50 mm	0.5156	33/64"	13.10 mm
SAE NF	1/2-20			0.4687	15/32"	11.90 mm	0.4531	29/64"	11.50 mm						

Selections made from:
 Little Machine Shop 2019
 C.W. Mardel 1960
 Greenfield Drill 2019
 21st Machinery's Handbook
 Ken's experience

Clearance Drill sizes:
 Clearance avg +.010-.015
 Close Fit avg +.005-.010