Fractional Machine Screws Tapping and Clearance Drills Table

This table is the chart for publication of information of fractional machine screws, along with tap and clearance drill information.

Screw Size				Tapping Drills			Clearance Drills			
					Equivalents		Close Fit		Free Fit	
Nom. Dia. (in)	Threads /Inch	Series	Dec. Equiv.	Drill Size (65-75% thread)	(decimal)	(mm)	Drill Size	Dec. Equiv.	Drill Size	Dec. Equiv.
1/16	64	NS	0.0625	3/64"	0.0469	1.1913	52	0.0635	51	0.0670
	72	NS		3/64"	0.0469	1.1913				
5/64	60	NS	0.0781	1/16"	0.0625	1.5875	46	0.0810	45	0.0820
	72	NS		52	0.0635	1.6129				

3/32	48	NS	0.0938	49	0.0730	1.8542	41	0.0960	40	0.0980
	50	NS		49	0.0730	1.8542				
7/64	48	NS	0.1094	43	0.0890	2.2606	34	0.1110	32	0.1160
1/8	32	NS	0.1250	3/32"	0.0938	2.3825	30	0.1285	29	0.1360
	40	NS		38	0.1015	2.5781				
9/64	40	NS	0.1406	32	0.1160	2.9464	27	0.1440	26	0.1470
5/32	32	NS	0.1563	1/8"	0.1250	3.1750	20	0.1610	19	0.1660
	36	NS		30	0.1285	3.2639				
11/64	32	NS	0.1719	9/64"	0.1406	3.5712	16	0.1770	15	0.1800
3/16	24	NS	0.1875	26	0.1470	3.7338	11	0.1910	9	0.1960
	32	NS		22	0.1570	3.9878				
13/64	24	NS	0.2031	20	0.1610	4.0894	4	0.2090	3	0.2130
7/32	24	NS	0.2188	16	0.1770	4.4958	2	0.2210	1	0.2280
	32	NS		12	0.1890	4.8006				
15/64	24	NS	0.2344	10	0.1935	4.9149	C	0.2420	D	0.2460
1/4	20	NC	0.2500	7	0.2010	5.1054	F	0.2570	H	0.2660

	24	NS		4	0.2090	5.3086					
	27	NS		3	0.2130	5.4102					
	28	NF		3	0.2130	5.4102					
	32	NEF		7/32"	0.2188	5.5575					
5/16	18	NC	0.3125	F	0.2570	6.5278	P	0.3230	Q	0.3320	
	20	NS		17/64"	0.2656	6.7462					
	24	NF		I	0.2720	6.9088					
	27	NS		J	0.2770	7.0358					
	32	NEF		9/32"	0.2812	7.1425					
3/8	16	NC	0.3750	5/16"	0.3125	7.9375	W	0.3860	X	0.3970	
	20	NS		21/64"	0.3281	8.3337					
	24	NF		Q	0.3320	8.4328					
	27	NS		R	0.3390	8.6106					
	32	NEF		11/32"	0.3438"	8.7325					
7/16	14	NC	0.4375	U	0.3680	9.3472	29/64"	0.4531	15/32"	0.4687	
	20	NF		25/64"	0.3906	9.9212					

	24	NS		X	0.3970	10.0838				
	27	NS		Y	0.4040	10.2616				
	28	NEF		15/32"	0.4688	11.9075				
1/2	12	NS	0.5000	27/64"	0.4219	10.7163	33/64"	0.5156	17/32"	0.5312
	13	NC		27/64"	0.4219	10.7163				
	20	NF		29/64"	0.4531	11.5087				
	24	NS		29/64"	0.4531	11.5087				
	27	NS		15/32"	0.4688	11.9075				
	28	NEF		15/32"	0.4688	11.9075				
9/16	12	NC	0.5625	31/64"	0.4844	12.3038	37/64"	0.5781	19/32"	0.5938
	18	NF		33/64"	0.5156	13.0962				
	24	NEF		33/64"	0.5156	13.0962				
	27	NS		17/32"	0.5313	13.4950				
5/8	11	NC	0.6250	17/32"	0.5313	13.4950	41/64"	0.6406	21/32"	0.6562
	12	NS		35/64"	0.5469	13.8913				
	18	NF		37/64"	0.5781	14.6837				

	24	NEF		37/64"	0.5781	14.6837					
	27	NS		19/32"	0.5937	15.0800					
11/16	11	NS	0.6875	19/32"	0.5937	15.0800	45/64"	0.7031	23/32"	0.6562
	16	NS		5/8"	0.6250	15.8750				
	24	NEF		41/64"	0.6406	16.4084				
3/4	10	NC	0.7500	21/32"	0.6562	16.6675	49/64"	0.7656	25/32"	0.7812
	12	NS		43/64"	0.6719	17.0663				
	16	NF		11/16"	0.6875	17.4625				
	20	NEF		45/64"	0.7031	17.8587				
	27	NS		23/32"	0.7187	18.2550				
13/16	10	NS	0.8125	23/32"	0.7187	18.2550	53/64"	0.8281	27/32"	0.8438
	20	NEF		49/64"	0.7656	19.4462				
7/8	9	NC	0.8750	49/64"	0.7656	19.4462	57/64"	0.8906	29/32"	0.9062
	12	NS		51/64"	0.7969	20.2413				
	14	NF		13/16"	0.8125	20.6375				
	18	NS		53/64"	0.8281	21.0337				

	20	NEF		53/64"	0.8281	21.0337				
	27	NS		27/32"	0.8437	21.4300				
15/16	9	NS	0.9375	53/64"	0.8281	21.0337	61/64"	0.9531	31/32"	0.9688
	20	NEF		57/64"	0.8906	22.6212				
1	8	NC	1.0000	7/8"	0.8750	22.2250	1-1/64"	1.0156	1-1/32"	1.0313
	12	NF		59/64"	0.9219	23.4163				
	14	NS		15/16"	0.9375	23.8125				
	20	NEF		61/64"	0.9531	24.2087				
	27	NS		31/32"	0.9687	24.6050				
	32	*		31/32"	0.9687	24.6050				
1-1/16	18	NEF	1.0625	1"	1.0000	25.4000	1-5/64"	1.0781	1-3/32"	1.0938
1-1/8	7	NC	1.1250	63/64"	0.9844	25.0038	1-9/64"	1.1406	1-5/32"	1.1562
	12	NF		1-3/64"	1.0469	26.5913				
	18	NEF		1-1/16"	1.0625	26.9875				
1-3/16	18	NEF	1.1875	1-1/8"	1.1250	28.5750	1-13/64"	1.2031	1-7/32"	1.2188

1-1/4	7	NC	1.2500	1-7/64"	1.1094	28.1788	1-17/64"	1.2656	1-9/32"	1.2812
	12	NF		1-11/64"	1.1719	29.7663				
	18	NEF		1-3/16"	1.1875	30.1625				
1-5/16	18	NEF	1.3125	1-1/4"	1.2500	31.7500	1-21/64"	1.3281	1-11/32"	1.3438
1-3/8	6	NC	1.3750	1-7/32"	1.2188	30.9575	1-25/64"	1.3906	1-13/32"	1.4062
	12	NF		1-19/64"	1.2969	32.9413				
	18	NEF		1-5/16"	1.3125	33.3375				
1-7/16	18	NEF	1.3693	1-3/8"	1.3750	34.9250	1-29/64"	1.4531	1-15/32"	1.4688
1-1/2	6	NC	1.5000	1-11/32"	1.3438	34.1325	1-33/64"	1.5156	1-17/32"	1.5312
	12	NF		1-27/64"	1.4219	36.1163				
	18	NEF		1-7/16"	1.4375	36.5125				
1-9/16	18	NEF	1.5625	1-1/2"	1.5000	38.1000	1-37/64"	1.5781	1-19/32"	1.5938
1-5/8	5 1/2	NS	1.6250	1-29/64"	1.4531	36.9087	1-41/64"	1.6406	1-21/32"	1.6562
	18	NEF		1-9/16"	1.5625	39.6875				

1-11/16	18	NEF	1.6875	1-5/8"	1.6250	41.2750	1-45/64"	1.7031	1-23/32"	1.7188
1-3/4	5	NC	1.7500	1-9/16"	1.5625	39.6875	1-49/64"	1.7659	1-25/32"	1.7812
1-7/8	5	NS	1.8750	1-11/16"	1.6875	42.8625				
2	4 1/2	NC	2.0000	1-25/32"	1.7813	45.2450				

Nom. Dia. (in)	**Threads /Inch**	**Series**	**Dec. Equiv.**	**Drill Size (65-75% thread)**	**(decimal)**	**(mm)**	**Drill Size**	**Dec. Equiv.**	**Drill Size**	**Dec. Equiv.**
					Equivalents		**Close Fit**		**Free Fit**	
Screw Size				**Tapping Drills**			**Clearance Drills**			