

TAP DRILL AND CLEARANCES FOR ENGLISH HARDWARE

For steel and iron, add 10% to tap drill for 50% thread
For all other metals, use as shown for 75% thread

Hardware		Tap Drill		Close Fit Drill		Free Fit Drill	
Size	Thread	Code	Size	Code	Size	Code	Size
0	80	3/64	0.0469	52	0.0635	50	0.0700
1	64	53	0.0595	56	0.0465	48	0.0760
1	72	53	0.0595	56	0.0465	48	0.0760
2	56	50	0.0700	43	0.0890	41	0.0960
2	64	50	0.0700	43	0.0890	41	0.0960
3	48	47	0.0785	37	0.1040	35	0.1100
3	56	45	0.0820	37	0.1040	35	0.1100
4	40	43	0.0890	32	0.1160	30	0.1285
4	48	42	0.0935	32	0.1160	30	0.1285
5	40	38	0.1015	30	0.1285	29	0.1360
5	44	37	0.1040	30	0.1285	29	0.1360
6	32	36	0.1065	27	0.1440	25	0.1495
6	40	33	0.1130	27	0.1440	25	0.1495
8	32	29	0.1360	18	0.1695	16	0.1770
8	36	29	0.1360	18	0.1695	16	0.1770
10	24	25	0.1495	9	0.1960	7	0.2010
10	32	21	0.1590	9	0.1960	7	0.2010
12	24	16	0.1770	2	0.2210	1	0.2280
12	28	14	0.1820	2	0.2210	1	0.2280
12	32	13	0.1850	2	0.2210	1	0.2280
1/4	20	7	0.2010	F	0.2570	H	0.2660
1/4	28	3	0.2130	F	0.2570	H	0.2660
1/4	32	7/32	0.2188	F	0.2570	H	0.2660
5/16	18	F	0.2570	P	0.3230	Q	0.3320
5/16	24	I	0.2727	P	0.3230	Q	0.3320
5/16	32	9/32	0.2813	P	0.3230	Q	0.3320
3/8	16	5/16	0.3125	W	0.3860	X	0.3970
3/8	24	Q	0.3320	W	0.3860	X	0.3970
3/8	32	11/32	0.3438	W	0.3860	X	0.3970
7/16	14	U	0.3680	29/64	0.4531	15/32	0.4688
7/16	20	25/64	0.3906	29/64	0.4531	15/32	0.4688
7/16	28	Y	0.4040	29/64	0.4531	15/32	0.4688
1/2	13	27/64	0.4219	33/64	0.5156	17/32	0.5313
1/2	20	29/64	0.4531	33/64	0.5156	17/32	0.5313
1/2	28	15/32	0.4688	33/64	0.5156	17/32	0.5313
9/16	12	31/64	0.4844	37/64	0.5781	19/32	0.5938
9/16	18	33/64	0.5156	37/64	0.5781	19/32	0.5938
9/16	24	33/64	0.5156	37/64	0.5781	19/32	0.5938
5/8	11	17/32	0.5313	41/64	0.6406	21/32	0.6563
5/8	18	37/64	0.5781	41/64	0.6406	21/32	0.6563
5/8	24	37/64	0.5781	41/64	0.6406	21/32	0.6563
11/16	24	41/64	0.6508	45/64	0.7031	23/32	0.7188
3/4	10	21/32	0.6563	49/64	0.7656	25/32	0.7813
3/4	16	11/16	0.6875	49/64	0.7656	25/32	0.7813
3/4	20	45/64	0.7031	49/64	0.7656	25/32	0.7813
13/16	20	49/64	0.7656	53/64	0.8281	27/32	0.8438
7/8	9	49/64	0.7656	57/64	0.8906	29/32	0.9063
7/8	14	13/16	0.8125	57/64	0.8906	29/32	0.9063
7/8	20	53/64	0.8281	57/64	0.8906	29/32	0.9063
15/16	20	57/64	0.8906	61/64	0.9531	31/32	0.9688
1	8	7/8	0.8750	1-1/64	1.0156	1-1/32	1.0313
1	12	15/16	0.9375	1-1/64	1.0156	1-1/32	1.0313
1	20	61/64	0.9531	1-1/64	1.0156	1-1/32	1.0313

Pipe Taps		Tap Drill	
Size	Thread	Code	Size
1/8 NPT	27	11/32	0.34380
1/4 NPT	18	7/16	0.43750
3/8 NPT	18	19/32	0.59380
1/2 NPT	14	23/32	0.71880
3/4 NPT	14	15/16	0.93750