

BA THREAD CHART

No.	OD	TPI	CLEARING		TAPPING		NUT DATA		
			DRILL	CL	Drill	%	A/F	DIA	Thick
0	0.236	25	B	1.8	No. 11	96	0.413	0.477	0.221(No. 2)
			C	5.8	No. 10	90			
					No. 9	85			
					No. 8	78			
1	0.209	28	4mm	0.3	No. 18	90	0.365	0.422	0.196 (No. 9)
					No. 17	83			
2	0.185	31	No. 13	0	No. 25	93	0.324	.0374	0.173 (No. 17)
			3/16	2.5	No. 24	76			
			No. 12	4.0	No. 23	81			
			No. 11	6.0	No. 22	73			
3	0.161	35	No. 20	0	No. 30	95	0.282	0.326	0.151 (No. 24)
			No. 19	4.6	No. 29	73			
4	0.142	39	No. 27	2.3	No. 34	99	0.248	0.286	0.132 (No. 29)
			No. 26	5.3	No. 33	92			
					No. 32	83			
5	0.126	43	No. 30	2.5	No. 39	94	0.220	0.254	0.118 (No. 31)
		29	No. 29	10	No. 38	86			
					No. 37	77			
6	0.110	48	No. 34	0.8	No. 44	96	0.172	0.199	0.102 (No. 38)
			No. 33	2.8	No. 43	84			
7	0.0984	53	No. 40	0	No. 47	88	0.193	0.223	0.092 (No. 44)
8	0.086	59	No. 44	1.0	No. 51	96	0.152	0.172	0.082 (No. 45)
			No. 43	2.4	No. 50	81			
9	0.0748	65	No. 48	1.2	No. 53	82	0.131	0.151	0.070 (No. 50)
10	0.0669	73	No. 51	0.1	No. 55	90	0.117	0.135	0.063 (52) No.
11	0.591	82	No. 53	0.4	No. 56	84	0.103	0.119	0.055 (No. 54)
			No. 52	4.4	3/16	82			
12	0.0511	91	No. 55	0.9	No. 62	95	0.090	0.104	0.048 (No. 56)
			No. 54	0.9	No. 61	88			
					No. 60	81			
					No. 59	73			
14	0.0394	110	No. 61	0	No. 69	92	0.069	0.080	0.037 (No. 63)
			No. 60	1.0	No. 68	75			
16	0.0311	134	No. 68	0	No. 74	94	0.054	0.062	0.029 (No. 69)
			No. 67	1.0	No. 73	77			

BA Thread Chart Notes.

No.	The BA number of the thread.
OD	The outside diameter of the full form thread in inches.
TPI	The number of teethe per inch.
CLEARING	DRILL - is the nearest drill size to fully clear the thread.
	CL - is the actual clearance of the hole to the thread (in thous)
TAPPING	DRILL - is the drill size required for the associated thread. For most threads there is a choice of drill sizes. Smaller size drills will produce threads closer to the full thread form, larger drills will produce threads with less than the full thread form. The percentage of full thread form is indicated for each drill size (see below).
	<p>% - corresponds to the % depth of the thread for the associated drill size. In theory, the higher the % value, the stronger the thread. However the lower the percentage the easier the hole will be to tap, as the tap has to remove less metal. In practice, the reduction in thread strength is not dramatic even for the lower % values and the ultimate holding strength of the thread is more often determined by the shear strength of the screw. For most practical purposes lower value % may be used with a corresponding reduction in broken taps.</p> <p>However, when tapping thin materials such as sheet brass a high % value is recommended as only a few threads are engaged and therefore they should be as strong as possible. When a screw is to be used frequently where wear might take place, a high % value is also recommended.</p> <p>NB. These are theoretical values, bear in mind that drills often drill oversize, thus reducing the actual % value. If in doubt try, a test in waste material before tapping a critical hole.</p>
NUT DATA	A/F - this is the across the flats measurement of the associated nut/hex head.
	DIA - this is the full circle diameter of the bar stock used to make the hexagon.
	THICK - This is the thickness of a full nut (the data in parentheses gives the size of the equivalent drill (as used for setting depth stops etc).

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