

**BSF (British Standard Fine)** Angle of thread = 55

Diameter Inches	T P I	Pitch inches	Core Diameter	Tapping Drill Size
3/16	32	0.0313	0.1475	5/32 inch (3.97 mm)
7/32	28	0.0357	0.173	Number drill 15 (4.6 mm)
1/4	26	0.0385	0.2008	Number drill 6 (5.3 mm)
5/16	22	0.0455	0.2543	17/64 inch (6.75 mm)
3/8	20	0.05	0.311	Letter drill P (8.2 mm)
7/16	18	0.0556	0.3663	9.7 mm (0.3819 inch)
1/2	16	0.0625	0.42	7/16 inch (11.11 mm)
9/16	16	0.0625	0.4825	1/2 inch (12.7 mm)
5/8	14	0.0714	0.5336	14mm (0.5512 inch)
11/16	14	0.0714	0.5961	15.5 mm (0.6102 inch)
3/4	12	0.0833	0.6432	16.75 mm (0.6594 inch)
7/8	11	0.0909	0.7586	25/32 inch (19.84 mm)
1 inch	10	0.1	0.872	22.75 mm (0.8957 inch)

**BA (British Association)**

Screw Numbers	Diameter of Screw Over Thread	T P I	Pitch	Diameter at Thread Bottom	Tapping Drill Size
16 BA	0.0310 inch	133.3 tpi	0.0075 inch	0.0220 inch	Number drill 73 (0.6 mm / 0.0236 inch)
15 BA	0.035 inch	120.5 tpi	0.0083 inch	0.025 inch	Number drill 70 (0.7 mm / 0.0276 inch)
14 BA	0.039 inch	109.9 tpi	0.0091 inch	0.028 inch	0.8 mm (0.0315 inch)
13 BA	0.047 inch	102 tpi	0.0098 inch	0.0352 inch	Number drill 62 (0.98 mm / 0.0386 inch)
12 BA	0.051 inch	90.9 tpi	0.011 inch	0.0378 inch	Number drill 60 (1.05 mm / 0.0413 inch)
11 BA	0.059 inch	81.9 tpi	0.0122 inch	0.0443 inch	Number drill 56 (1.2 mm / 0.0472 inch)
10 BA	0.067 inch	72.6 tpi	0.0138 inch	0.0504 inch	Number drill 54 (1.4 mm / 0.0551 inch)
9 BA	0.075 inch	65.1 tpi	0.0154 inch	0.0565 inch	1.55 mm (0.061 inch)
8 BA	0.086 inch	59.1 tpi	0.0169 inch	0.0657 inch	Number drill 50 (1.8 mm / 0.0709 inch)
7 BA	0.0982 inch	52.9 tpi	0.0189 inch	0.0753 inch	Number drill 46 (2.05 mm / 0.0807 inch)
6 BA	0.11 inch	47.9 tpi	0.0209 inch	0.0849 inch	2.3 mm (0.0906 inch)
5 BA	0.126 inch	43 tpi	0.0232 inch	0.0981 inch	Number drill 37 (2.65 mm / 0.1043 inch)
4 BA	0.1420 inch	38.5 tpi	0.0260 inch	0.1108 inch	Number drill 31 (3 mm / 0.1181 inch)
3 BA	0.1610 inch	34.8 tpi	0.0287 inch	0.1266 inch	Number drill 29 (3.4 mm / 0.1339 inch)
2 BA	0.1850 inch	31.4 tpi	0.0319 inch	0.1467 inch	Number drill 22 (4 mm / 0.1575 inch)
1 BA	0.2090 inch	28.2 tpi	0.0354 inch	0.1665 inch	Number drill 16 (4.5 mm / 0.1772 inch)
0 BA	0.2360 inch	25.4 tpi	0.0394 inch	0.1887 inch	Number drill 9 (5.1 mm / 0.2008 inch)

**BSW (British Standard Whitworth)** Angle of Thread = 55

Diameter Inches	T P I	Pitch inches	Core Diameter	Tapping Drill Size
1/16	60	0.0167	0.0411	Number Drill 56 (1.2 mm)
3/32	48	0.0208	0.0672	Number Drill 49 (1.85 mm)
1/8	40	0.025	0.093	Number Drill 39 (2.55 mm)
5/32	32	0.0313	0.1162	Number Drill 30 (3.2 mm)
3/16	24	0.0417	0.1341	Number Drill 26 (3.7 mm)
7/32	24	0.0417	0.1654	Number Drill 16 (4.5 mm)
1/4	20	0.05	0.186	Number Drill 9 (5.1 mm)
5/16	18	0.0556	0.2413	Letter Drill F (6.5 mm)
3/8	16	0.0625	0.295	5/16 inch (7.94 mm)
7/16	14	0.0714	0.3461	Letter Drill U (9.3 mm)
1/2	12	0.0833	0.3932	Letter Drill Z (10.5 mm)
9/16	12	0.0833	0.4557	12.1 mm (0.4764 inch)
5/8	11	0.0909	0.5086	13.5 mm (0.5315 inch)
11/16	11	0.0909	0.5711	15 mm (0.5906 inch)
3/4	10	0.1	0.622	41/64 inch (16.27 mm)
13/16	10	0.1	0.6845	18 mm (0.7087 inch)
7/8	9	0.1111	0.7328	19.25 mm (0.7579 inch)
15/16	9	0.1111	0.7953	20.75 mm (0.8169 inch)
1 inch	8	0.125	0.84	22 mm (0.8661 inch)

**BSC (British Standard Cycle)** Angle of thread = 60

Diameter (Inches)	T P I	Pitch (Inch)	Core Diameter (Inch)	Tapping Drill Size
0.125 (1/8th) inch	40 Tpi	0.025	0.0984 ins	Number Drill 39 (0.1004 inch / 2.5mm)
0.1563 (5/32) inch	32 Tpi	0.0312	0.1231 ins	Number Drill 30 (0.126 inch / 3.25mm)
0.1875 (3/16) inch	32 Tpi	0.0312	0.1542 ins	Number Drill 23 (0.1562 inch / 3.97mm)
0.250 (1/4) inch	26 Tpi	0.0385	0.2091 ins	Number Drill 3 (0.2188 inch / 5.56mm)
0.281 (9/32) inch	26 Tpi	0.0385	0.2403 ins	Letter Drill D (0.2441 inch / 6.2 mm)
0.3125 (5/16) inch	26 Tpi	0.0385	0.2715 ins	Letter Drill J (0.2756 inch / 7 mm)
0.375 (3/8) inch	26 Tpi	0.0385	0.334 ins	Letter Drill R (0.3368 inch / 8.65 mm)
0.4375 (7/16) inch	26 Tpi	0.0385	0.3965 ins	Letter Drill X (0.3976 inch / 10.1 mm)
0.5 (1/2) inch	26 Tpi	0.0385	0.4590 ins	0.4606 inch (11.7 mm)
0.5625 (9/16) inch	26 Tpi	0.0385	0.5215 ins	0.5156 (33/64) inch (13.1 mm)
0.625 (5/8) inch	26 Tpi	0.0385	0.5840 ins	0.5906 inch (15 mm)
0.6875 (11/16) inch	26 Tpi	0.0385	0.6465 ins	0.6496 inch (16.5 mm)
1 inch	26 Tpi	0.0385	0.959 ins	0.9688 (31/32) inch (24.61.1 mm)

### BSP (British Standard Pipe) Angle of thread = 55

Nominal Size (inches)	T P I	Pitch (inches)	Major Diameter (inches)	Minor Diameter (inches)	Tapping Drill Size
1/16	28	0.0357	0.304	0.2583	Letter drill G (6.6 mm)
1/8	28	0.0357	0.383	0.3372	11/32 inch (8.73 mm)
1/4	19	0.0526	0.518	0.4546	11.8 mm (0.4646 inch)
3/8	19	0.0526	0.656	0.5886	15.25 mm (0.6004 inch)
1/2	14	0.0714	0.825	0.7336	3/4 inch (19.05 mm)
5/8	14	0.0714	0.902	0.8106	21 mm (0.8268 inch)
3/4	14	0.0714	1.041	0.9496	24.5 mm (0.9646 inch)
7/8	14	0.0714	1.189	1.0976	28.25 mm (1.1122 inch)
1 inch	11	0.0909	1.309	1.1926	30.75 mm (1.2106 inch)

### CEI (Cycle Engineers Institute) Angle of thread = 60

Size (inches)	Wire Gauge	T P I	Pitch	Core Diameter	Usual Applications	Tapping Drill Size
0.056 inch	17 WG	62 Tpi	0.0161 ins	0.0388 ins	Spokes	Number drill 61 1mm 0.0394 inch
0.064 inch	16 WG	62 Tpi	0.0161 ins	0.0468 ins	Spokes	0.0469 inch (3/64)
0.072 inch	15 WG	62 Tpi	0.0161 ins	0.0598 ins	Spokes	Number Drill 54 0.0551 inch 1.4mm
0.080 inch	14 WG	62 Tpi	0.0161 ins	0.0628 ins	Spokes	Number Drill 52 0.0635 inch 1.6 mm
0.092 inch	13 WG	56 Tpi	0.0178 ins	0.0729 ins	Spokes	Number Drill 49 0.0728 inch 1.85mm
0.104 inch	12 WG	44 Tpi	0.0227 ins	0.0798 ins	Spokes	Number Drill 46 0.0807 inch 2.05mm
0.125 (1/8th) inch	-	40 Tpi	0.025 ins	0.0984 ins	Small Fixing Screws	Number Drill 39 0.1004 inch 2.5mm
0.154 inch	-	40 Tpi	0.025 ins	0.1274 ins	Chain Couplings	Number Drill 30 0.126 inch 3.25mm
0.175 inch	-	32 Tpi	0.0312 ins	0.1417 ins	General Use	Number Drill 27 0.126 inch 3.25mm
0.1875 (3/16) inch	-	32 Tpi	0.0312 ins	0.1542 ins	Misc Screws	Number Drill 23 0.1562 inch 3.97mm
0.250 (1/4) inch	-	26 Tpi	0.0385 ins	0.2091 ins	Crank Cotters	Number Drill 3 0.2188 inch 5.56mm
0.266 inch	-	26 Tpi	0.0385 ins	0.2280 ins	General Use	Number Drill 1 0.2283 inch 5.8 mm
0.281 inch	-	26 Tpi	0.0385 ins	- ins	-	Letter Drill D 0.2441 inch 6.2 mm
0.3125 (5/16) inch	-	26 Tpi	0.0385 ins	0.2715 ins	Front Wheel Spindles	Letter Drill J 0.2756 inch 7 mm
0.5625 (9/16) inch	-	20 Tpi	0.05 ins	0.498 ins	Pedal Pins in RH and LH Thread	0.5156 (33/64) inch 13.1 mm
0.9675 (9/16) inch	-	30 Tpi	0.033 ins	0.954 ins	Steering Stems	-
1 inch	-	26 Tpi	0.0385 ins	0.959 ins	Steering Stems	0.9688 (31/32) inch 24.61.1 mm

### UNF (Unified Fine Thread) Angle of Thread = 60

diameter in inches	T P I	Pitch	Root Diameter Internal Threads	Root Diameter External Threads	Tapping Drill Size
1/4	28	0.0357	0.2113	0.2062	5.5 mm (0.2165 inch)
5/16	24	0.0417	0.2674	0.2614	6.9 mm (0.2717 inch)
3/8	24	0.0417	0.3299	0.3239	8.5 mm (0.3346 inch)
7/16	20	0.05	0.3834	0.3762	9.9 mm (0.3898 inch)
1/2	20	0.05	0.4459	0.4387	11.4 mm (0.4488 inch)
9/16	18	0.0556	0.5024	0.4943	12.9 mm (0.5079 inch)
5/8	18	0.0556	0.5649	0.5568	14.5 mm (0.5709 inch)
3/4	16	0.0625	0.6823	0.6733	11/16 inch (17.46 mm)
7/8	14	0.0714	0.7977	0.7874	25/32 inch (19.84 mm)
1 inch	12	0.0833	0.9098	0.8978	23.25 mm (0.9154 inch)

### Inch to Metric Conversion Table

Inch	Metric	Inch	Metric	Inch	Metric	Inch	Metric
1/64	0.397	17/64	6.747	33/64	13.097	49/64	19.447
1/32	0.794	9/32	7.144	17/32	13.494	25/32	19.844
3/64	1.191	19/64	7.541	35/64	13.891	51/64	20.241
1/16	1.588	5/16	7.938	9/16	14.288	13/16	20.638
5/64	1.984	21/64	8.334	37/64	14.684	53/64	21.034
3/32	2.381	11/32	8.731	19/32	15.081	27/32	21.431
7/64	2.778	23/64	9.128	39/64	15.478	55/64	21.828
1/8	3.175	3/8	9.525	5/8	15.875	7/8	22.225
9/64	3.572	25/64	9.922	41/64	16.272	57/64	22.622
5/32	3.969	13/32	10.319	21/32	16.669	29/32	23.019
11/64	4.366	27/64	10.716	43/64	17.066	59/64	23.416
3/16	4.762	7/16	11.112	11/16	17.462	15/16	23.812
13/64	5.159	29/64	11.509	45/64	17.859	61/64	24.209
7/32	5.556	15/32	11.906	23/32	18.256	31/32	24.606
15/64	5.953	31/64	12.303	47/64	18.653	63/64	25.003
1/4	6.350	1/2	12.700	3/4	19.050	1	25.400

### UNC (Unified Coarse Thread) Angle of Thread = 60

diameter in inches	T P I	Pitch	Root Diameter Internal Threads	Root Diameter External Threads	Tapping Drill Size
1/4	20	0.05	0.1959	0.1887	Number Drill 7 (5.2 mm)
5/16	18	0.0556	0.2524	0.2443	Letter Drill G (6.6 mm)
3/8	16	0.0625	0.3073	0.2983	Letter Drill O (8 mm)
7/16	14	0.0714	0.3602	0.3499	9.4 mm (0.3701 inch)
1/2	13	0.0769	0.4167	0.4056	10.8 mm (0.4252 inch)
9/16	12	0.0833	0.4723	0.4603	12.2 mm (0.4803 inch)
5/8	11	0.0909	0.5266	0.5135	17/32 inch (13.49 mm)
3/4	10	0.1	0.6417	0.6273	16.5 mm (0.6496 inch)
7/8	9	0.1111	0.7547	0.7387	49/64 inch (19.45 mm)
1 inch	8	0.125	0.8647	0.8466	22.25 mm (0.8760 inch)