UNS Thread Dimensions Chart (ASME B1.1)

Unified National Special Thread — Nominal Diameter, Major Diameter, Tapping Drill, TPI, Pitch

Nominal Diameter	Major Diameter (in)	Major Diameter (mm)	Tapping Drill Size (mm)	TPI	Pitch (mm)
10 - 28 UNS	0.1900	4.826	3.95	28	0.907
10 - 36 UNS	0.1900	4.826	4.15	36	0.706
10 - 40 UNS	0.1900	4.826	4.20	40	0.635
10 - 48 UNS	0.1900	4.826	4.35	48	0.529
10 - 56 UNS	0.1900	4.826	4.39	56	0.454
12 - 36 UNS	0.2160	5.486	4.80	36	0.706
12 - 40 UNS	0.2160	5.486	4.90	40	0.635
12 - 48 UNS	0.2160	5.486	4.98	48	0.529
12 - 56 UNS	0.2160	5.486	5.05	56	0.454
1/4" - 24 UNS	0.2500	6.350	5.35	24	1.058
1/4" - 27 UNS	0.2500	6.350	5.45	27	0.941
1/4" - 36 UNS	0.2500	6.350	5.70	36	0.706
1/4" - 40 UNS	0.2500	6.350	5.75	40	0.635
1/4" - 48 UNS	0.2500	6.350	5.85	48	0.529
1/4" - 56 UNS	0.2500	6.350	5.95	56	0.454
5/16" - 27 UNS	0.3125	7.938	7.10	27	0.941
5/16" - 36 UNS	0.3125	7.938	7.25	36	0.706
5/16" - 40 UNS	0.3125	7.938	7.40	40	0.635
5/16" - 48 UNS	0.3125	7.938	7.50	48	0.529
3/8" - 18 UNS	0.3750	9.525	8.20	18	1.411
3/8" - 27 UNS	0.3750	9.525	8.70	27	0.941
3/8" - 36 UNS	0.3750	9.525	8.90	36	0.706
3/8" - 40 UNS	0.3750	9.525	9.00	40	0.635
0.390" - 27 UNS	0.3900	9.906	9.00	27	0.941
7/16" - 18 UNS	0.4375	11.112	9.75	18	1.411
7/16" - 24 UNS	0.4375	11.112	10.10	24	1.058
7/16" - 27 UNS	0.4375	11.112	10.20	27	0.941
1/2" - 12 UNS	0.5000	12.700	10.75	12	2.117

Nominal Diameter	Major Diameter (in)	Major Diameter (mm)	Tapping Drill Size (mm)	TPI	Pitch (mm)
1/2" - 14 UNS	0.5000	12.700	11.00	14	1.814
1/2" - 18 UNS	0.5000	12.700	11.40	18	1.411
1/2" - 24 UNS	0.5000	12.700	11.70	24	1.058
1/2" - 27 UNS	0.5000	12.700	11.85	27	0.941
9/16" - 14 UNS	0.5625	14.288	12.60	14	1.814
9/16" - 27 UNS	0.5625	14.288	13.40	27	0.941
5/8" - 14 UNS	0.6250	15.875	14.20	14	1.814
5/8" - 27 UNS	0.6250	15.875	15.00	27	0.941
3/4" - 14 UNS	0.7500	19.050	17.40	14	1.814
3/4" - 18 UNS	0.7500	19.050	17.75	18	1.411
3/4" - 24 UNS	0.7500	19.050	18.10	24	1.058
3/4" - 27 UNS	0.7500	19.050	18.20	27	0.941
7/8" - 10 UNS	0.8750	22.225	19.75	10	2.540
7/8" - 18 UNS	0.8750	22.225	21.00	18	1.411
7/8" - 24 UNS	0.8750	22.225	21.20	24	1.058
7/8" - 27 UNS	0.8750	22.225	21.40	27	0.941
1" - 10 UNS	1.0000	25.400	23.00	10	2.540
1" - 14 UNS	1.0000	25.400	23.75	14	1.814
1" - 18 UNS	1.0000	25.400	24.25	18	1.411
1" - 24 UNS	1.0000	25.400	24.50	24	1.058
1" - 27 UNS	1.0000	25.400	24.50	27	0.941
1 1/8" - 10 UNS	1.1250	28.575	26.25	10	2.540
1 1/8" - 14 UNS	1.1250	28.575	27.00	14	1.814
1 1/8" - 24 UNS	1.1250	28.575	27.75	24	1.058
1 1/4" - 10 UNS	1.2500	31.750	29.50	10	2.540
1 1/4" - 14 UNS	1.2500	31.750	30.00	14	1.814
1 1/4" - 24 UNS	1.2500	31.750	30.75	24	1.058
1 3/8" - 10 UNS	1.3750	34.925	32.60	10	2.540
1 3/8" - 14 UNS	1.3750	34.925	33.30	14	1.814
1 1/2" - 10 UNS	1.5000	38.100	35.70	10	2.540
1 1/2" - 14 UNS	1.5000	38.100	36.50	14	1.814

Nominal Diameter	Major Diameter (in)	Major Diameter (mm)	Tapping Drill Size (mm)	TPI	Pitch (mm)
1 1/2" - 24 UNS	1.5000	38.100	37.30	24	1.058
1 5/8" - 10 UNS	1.6250	41.275	39.00	10	2.540
1 5/8" - 14 UNS	1.6250	41.275	39.50	14	1.814
1 5/8" - 24 UNS	1.6250	41.275	40.35	24	1.058
1 3/4" - 10 UNS	1.7500	44.450	42.00	10	2.540
1 3/4" - 14 UNS	1.7500	44.450	42.85	14	1.814
1 3/4" - 18 UNS	1.7500	44.450	43.25	18	1.411
1 7/8" - 10 UNS	1.8750	47.625	45.30	10	2.540
1 7/8" - 14 UNS	1.8750	47.625	46.00	14	1.814
1 7/8" - 18 UNS	1.8750	47.625	46.35	18	1.411
2" - 10 UNS	2.0000	50.800	48.40	10	2.540
2" - 14 UNS	2.0000	50.800	49.25	14	1.814
2" - 18 UNS	2.0000	50.800	49.50	18	1.411
2 1/16" - 16 UNS	2.0625	52.387	51.00	16	1.587
2 3/16" - 16 UNS	2.1875	55.563	54.10	16	1.587
2 1/4" - 10 UNS	2.2500	57.150	54.75	10	2.540
2 1/4" - 14 UNS	2.2500	57.150	55.50	14	1.814
2 1/4" - 18 UNS	2.2500	57.150	55.75	18	1.411
2 5/16" - 16 UNS	2.3125	58.737	57.30	16	1.587
2 7/16" - 16 UNS	2.4375	61.912	60.50	16	1.587
2 1/2" - 10 UNS	2.5000	63.500	61.20	10	2.540
2 1/2" - 14 UNS	2.5000	63.500	61.75	14	1.814
2 1/2" - 18 UNS	2.5000	63.500	62.30	18	1.411
2 3/4" - 10 UNS	2.7500	69.850	67.50	10	2.540
2 3/4" - 14 UNS	2.7500	69.850	68.25	14	1.814
2 3/4" - 18 UNS	2.7500	69.850	68.50	18	1.411
3" - 10 UNS	3.0000	76.200	73.80	10	2.540
3" - 14 UNS	3.0000	76.200	74.50	14	1.814
3" - 18 UNS	3.0000	76.200	75.00	18	1.411
3 1/4" - 10 UNS	3.2500	82.550	80.25	10	2.540
3 1/4" - 14 UNS	3.2500	82.550	81.00	14	1.814

Nominal Diameter	Major Diameter (in)	Major Diameter (mm)	Tapping Drill Size (mm)	TPI	Pitch (mm)
3 1/4" - 18 UNS	3.2500	82.550	81.25	18	1.411
3 1/2" - 10 UNS	3.5000	88.900	86.55	10	2.540
3 1/2" - 14 UNS	3.5000	88.900	87.25	14	1.814
3 1/2" - 18 UNS	3.5000	88.900	87.60	18	1.411
3 3/4" - 10 UNS	3.7500	95.250	93.00	10	2.540
3 3/4" - 14 UNS	3.7500	95.250	93.60	14	1.814
3 3/4" - 18 UNS	3.7500	95.250	94.00	18	1.411
4" - 10 UNS	4.0000	101.600	99.30	10	2.540
4" - 14 UNS	4.0000	101.600	100.00	14	1.814
4 1/4" - 10 UNS	4.2500	107.950	105.60	10	2.540
4 1/4" - 14 UNS	4.2500	107.950	106.30	14	1.814
4 1/2" - 10 UNS	4.5000	114.300	112.00	10	2.540
4 1/2" - 14 UNS	4.5000	114.300	112.65	14	1.814
4 3/4" - 10 UNS	4.7500	120.650	118.35	10	2.540
4 3/4" - 14 UNS	4.7500	120.650	119.00	14	1.814
5" - 10 UNS	5.0000	127.000	124.70	10	2.540
5" - 14 UNS	5.0000	127.000	125.35	14	1.814
5 1/4" - 10 UNS	5.2500	133.350	131.00	10	2.540
5 1/4" - 14 UNS	5.2500	133.350	131.70	14	1.814
5 1/2" - 10 UNS	5.5000	139.700	137.40	10	2.540
5 1/2" - 14 UNS	5.5000	139.700	138.00	14	1.814
5 3/4" - 10 UNS	5.7500	146.050	143.75	10	2.540
5 3/4" - 14 UNS	5.7500	146.050	144.40	14	1.814
6" - 10 UNS	6.0000	152.400	150.00	10	2.540
6" - 14 UNS	6.0000	152.400	150.75	14	1.814

Disclaimer: For reference only. Tapping drill sizes are recommended values. Final machining drawing shall follow official ASME B1.1 specification.