

ANSI Bolt Thread Sizes

You can measure existing bolts with calipers then look up the size.

There are also even smaller #00, #000, #0000 bolt sizes that are not listed on this chart.

There are also six thread classes. *External threads*: 1A, 2A, 3A and *internal threads*: 1B, 2B, 3B where 1 is a loose thread and can suffer dirt, while 3 is a tight thread meant for precision and clean environments. 2 is middle of the road and the most common thread used.

In general fine threads will pull things together with more force, while coarse threads will work better for softer materials that cannot survive a strong clamp.

More detailed information can be found at:

<http://www.fastenal.com/content/documents/FastenalTechnicalReferenceGuide.pdf>

Bolt Size (0 is tiny) [Size]-[Threads/inch]	Major Dia	Pitch Dia	
0-80	0.0600	0.0519	0.0442
0-80	0.0600	0.0519	0.0447
1-64.	0.0730	0.0629	0.0532
1-64.	0.0730	0.0629	0.0538
1-72.	0.0730	0.0640	0.0554
1-72.	0.0730	0.0640	0.0560
2-56.	0.0860	0.0744	0.0635
2-56.	0.0860	0.0744	0.0641
2-64.	0.0860	0.0759	0.0662
2-64.	0.0860	0.0759	0.0668
3-48.	0.0990	0.0855	0.0727
3-48.	0.0990	0.0855	0.0734
3-56.	0.0990	0.0874	0.0764
3-56.	0.0990	0.0874	0.0771
4-40.	0.1120	0.0958	0.0805
4-40.	0.1120	0.0958	0.0813
4-48.	0.1120	0.0985	0.0857
4-48.	0.1120	0.0985	0.0864
5-40.	0.1250	0.1088	0.0935
5-40.	0.1250	0.1088	0.0943
5-44.	0.1250	0.1102	0.0964
5-44.	0.1250	0.1102	0.0971
6-32.	0.1380	0.1177	0.0989
6-32.	0.1380	0.1177	0.0997
6-40.	0.1380	0.1218	0.1065
6-40.	0.1380	0.1218	0.1073
8-32.	0.1640	0.1437	0.1248
8-32.	0.1640	0.1437	0.1257

8-36.	0.1640	0.1460	0.1291
8-36.	0.1640	0.1460	0.1299
10-24.	0.1900	0.1629	0.1379
10-24.	0.1900	0.1629	0.1389
10-32.	0.1900	0.1697	0.1508
10-32.	0.1900	0.1697	0.1517
1/4-20.	0.2500	0.2175	0.1876
1/4-20.	0.2500	0.2175	0.1887
1/4-28.	0.2500	0.2268	0.2052
1/4-28.	0.2500	0.2268	0.2062
5/16-18.	0.3125	0.2764	0.2431
5/16-18.	0.3125	0.2764	0.2443
5/16-24.	0.3125	0.2854	0.2603
5/16-24.	0.3125	0.2854	0.2614
3/8-16.	0.3750	0.3344	0.2970
3/8-16.	0.3750	0.3344	0.2983
3/8-24.	0.3750	0.3479	0.3228
3/8-24.	0.3750	0.3479	0.3239
7/16-14.	0.4375	0.3911	0.3485
7/16-14.	0.4375	0.3911	0.3499
7/16-20.	0.4375	0.4050	0.3749
7/16-20.	0.4375	0.4050	0.3762
1/2-13.	0.5000	0.4500	0.4041
1/2-13.	0.5000	0.4500	0.4056
1/2-20.	0.5000	0.4675	0.4374
1/2-20.	0.5000	0.4675	0.4387
5/8-11.	0.6250	0.5660	0.5119
5/8-11.	0.6250	0.5660	0.5135
5/8-18.	0.6250	0.5889	0.5554
5/8-18.	0.6250	0.5889	0.5568
3/4-10.	0.7500	0.6850	0.6255
3/4-10.	0.7500	0.6850	0.6273
3/4-16.	0.7500	0.7094	0.6718
3/4-16.	0.7500	0.7094	0.6733
7/8 -9.	0.8750	0.8028	0.7368
7/8 -9.	0.8750	0.8028	0.7387
7/8-14.	0.8750	0.8286	0.7858
7/8-14.	0.8750	0.8286	0.7874
1 -8.	1.0000	0.9188	0.8446

1 -8.	1.0000	0.9188	0.8466
1 -12.	1.0000	0.9459	0.8960
1 -12.	1.0000	0.9459	0.8978
1-1/8-7.	1.1250	1.0322	0.9475
1-1/8-12.	1.1250	1.0709	1.0210
1-1/4-7	1.2500	1.1572	1.0725
1-1/4-12	1.2500	1.1959	1.1460
1-3/8-6	1.3750	1.2667	1.1681
1-3/8-12	1.3750	1.3209	1.2709
1-1/2-6	1.5000	1.3917	1.2931
1-1/2-12	1.5000	1.4459	1.3959
1-3/4-5	1.7500	1.6201	1.5019
2 - 4-1/2	2.0000	1.8557	1.7245