

EXTERNAL THREAD DIMENSIONS

— UNC / UNF 3A

Unified UN / UNR · classes 3A

Limits of size of the external
thread (bolt)
min–max, per the cited
standard
57 threads · 2026-10-21

Thread · major Ø min–max · pitch Ø min–max · minor Ø min–max — diameters in in

#0-80 UNF	0.0568–0.0600	0.0506–0.0519	0.0425–0.0447
#1-72 UNF	0.0695–0.0730	0.0626–0.0640	0.0536–0.0560
#1-64 UNC	0.0692–0.0730	0.0614–0.0629	0.0513–0.0538
#2-64 UNF	0.0822–0.0860	0.0744–0.0759	0.0643–0.0668
#2-56 UNC	0.0819–0.0860	0.0728–0.0744	0.0612–0.0641
#3-56 UNF	0.0949–0.0990	0.0858–0.0874	0.0742–0.0771
#3-48 UNC	0.0945–0.0990	0.0838–0.0855	0.0703–0.0734
#4-48 UNF	0.1075–0.1120	0.0967–0.0985	0.0832–0.0864
#4-40 UNC	0.1069–0.1120	0.0939–0.0958	0.0777–0.0813
#5-44 UNF	0.1202–0.1250	0.1083–0.1102	0.0935–0.0971
#5-40 UNC	0.1199–0.1250	0.1069–0.1088	0.0907–0.0943
#6-40 UNF	0.1329–0.1380	0.1198–0.1218	0.1036–0.1073
#6-32 UNC	0.1320–0.1380	0.1156–0.1177	0.0953–0.0997
#8-36 UNF	0.1585–0.1640	0.1439–0.1460	0.1259–0.1299
#8-32 UNC	0.1580–0.1640	0.1415–0.1437	0.1212–0.1257
#10-32 UNF	0.1840–0.1900	0.1674–0.1697	0.1471–0.1517
#10-24 UNC	0.1828–0.1900	0.1604–0.1629	0.1333–0.1389
#12-28 UNF	0.2095–0.2160	0.1904–0.1928	0.1672–0.1722
#12-24 UNC	0.2088–0.2160	0.1863–0.1889	0.1592–0.1649
1/4-28 UNF	0.2435–0.2500	0.2243–0.2268	0.2011–0.2062
1/4-20 UNC	0.2419–0.2500	0.2147–0.2175	0.1822–0.1887
5/16-24 UNF	0.3053–0.3125	0.2827–0.2854	0.2556–0.2614
5/16-18 UNC	0.3038–0.3125	0.2734–0.2764	0.2373–0.2443
3/8-24 UNF	0.3678–0.3750	0.3450–0.3479	0.3179–0.3239
3/8-16 UNC	0.3656–0.3750	0.3311–0.3344	0.2905–0.2983
7/16-20 UNF	0.4294–0.4375	0.4019–0.4050	0.3694–0.3762
7/16-14 UNC	0.4272–0.4375	0.3876–0.3911	0.3412–0.3499
1/2-20 UNF	0.4919–0.5000	0.4643–0.4675	0.4318–0.4387
1/2-13 UNC	0.4891–0.5000	0.4463–0.4500	0.3963–0.4056
9/16-18 UNF	0.5538–0.5625	0.5230–0.5264	0.4869–0.4943
9/16-12 UNC	0.5511–0.5625	0.5045–0.5084	0.4504–0.4603
5/8-18 UNF	0.6163–0.6250	0.5854–0.5889	0.5493–0.5568
5/8-11 UNC	0.6129–0.6250	0.5619–0.5660	0.5029–0.5135
3/4-16 UNF	0.7406–0.7500	0.7056–0.7094	0.6650–0.6733
3/4-10 UNC	0.7371–0.7500	0.6806–0.6850	0.6156–0.6273
7/8-14 UNF	0.8647–0.8750	0.8245–0.8286	0.7781–0.7874

7/8-9 UNC	0.8611–0.8750	0.7981–0.8028	0.7259–0.7387
1-12 UNF	0.9886–1.0000	0.9415–0.9459	0.8874–0.8978
1-8 UNC	0.9850–1.0000	0.9137–0.9188	0.8325–0.8466
1-1/8-12 UNF	1.1136–1.1250	1.0664–1.0709	1.0123–1.0228
1-1/8-7 UNC	1.1086–1.1250	1.0268–1.0322	0.9340–0.9497
1-1/4-12 UNF	1.2386–1.2500	1.1913–1.1959	1.1372–1.1478
1-1/4-7 UNC	1.2336–1.2500	1.1517–1.1572	1.0589–1.0747
1-3/8-12 UNF	1.3636–1.3750	1.3162–1.3209	1.2621–1.2728
1-3/8-6 UNC	1.3568–1.3750	1.2607–1.2667	1.1524–1.1705
1-1/2-12 UNF	1.4886–1.5000	1.4411–1.4459	1.3870–1.3978
1-1/2-6 UNC	1.4818–1.5000	1.3856–1.3917	1.2773–1.2955
1-3/4-5 UNC	1.7295–1.7500	1.6134–1.6201	1.4835–1.5046
2-4.5 UNC	1.9780–2.0000	1.8486–1.8557	1.7043–1.7274
2-1/4-4.5 UNC	2.2280–2.2500	2.0984–2.1057	1.9541–1.9774
2-1/2-4 UNC	2.4762–2.5000	2.3298–2.3376	2.1674–2.1933
2-3/4-4 UNC	2.7262–2.7500	2.5797–2.5876	2.4173–2.4433
3-4 UNC	2.9762–3.0000	2.8296–2.8376	2.6672–2.6933
3-1/4-4 UNC	3.2262–3.2500	3.0794–3.0876	2.9170–2.9433
3-1/2-4 UNC	3.4762–3.5000	3.3293–3.3376	3.1669–3.1933
3-3/4-4 UNC	3.7262–3.7500	3.5792–3.5876	3.4168–3.4433
4-4 UNC	3.9762–4.0000	3.8291–3.8376	3.6667–3.6933