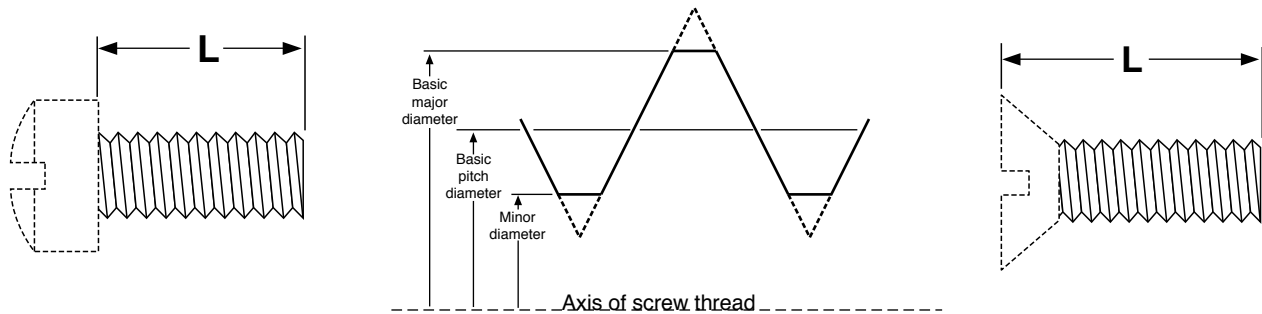


# DIMENSIONS



## 2A EXTERNAL THREADS FOR MACHINE SCREWS AND SEMS

ASME B 1.1 (2008)

Nominal Size & Threads per Inch	Series Designation	Allowance	Major Diameter		Pitch Diameter			Stress Area, in <sup>2</sup>	Tensile Strength, <sup>a</sup> lb., min. (STEEL screws only)
			Max	Min	Max	Min	Tolerance		
0-80 0.060	UNF	.0005	.0595	.0563	.0514	.0496	.001762	0.00180	-
1-64 0.073	UNC	.0006	.0724	.0686	.0623	.0603	.001970	0.00263	-
1-72 0.073	UNF	.0006	.0724	.0689	.0634	.0615	.001899	0.00278	-
2-56 0.086	UNC	.0006	.0854	.0813	.0738	.0717	.002127	0.00370	-
2-64 0.086	UNF	.0006	.0854	.0816	.0753	.0733	.002040	0.00394	-
3-48 0.099	UNC	.0007	.0983	.0938	.0848	.0825	.002302	0.00487	-
3-56 0.099	UNF	.0007	.0983	.0942	.0867	.0845	.002191	0.00523	-
4-40 0.112	UNC	.0008	.1112	.1061	.0950	.0925	.002507	0.00604	360
4-48 0.112	UNF	.0007	.1113	.1068	.0978	.0954	.002361	0.00661	396
5-40 0.125	UNC	.0008	.1242	.1191	.1080	.1054	.002562	0.00796	470
5-44 0.125	UNF	.0007	.1243	.1195	.1095	.1070	.002484	0.00830	498
6-32 0.138	UNC	.0008	.1372	.1312	.1169	.1141	.002820	0.00909	550
6-40 0.138	UNF	.0008	.1372	.1321	.1210	.1184	.002614	0.01015	609
8-32 0.164	UNC	.0009	.1631	.1571	.1428	.1399	.002916	0.0140	850
8-36 0.164	UNF	.0008	.1632	.1577	.1452	.1424	.002804	0.01474	884
10-24 0.190	UNC	.0010	.1890	.1818	.1619	.1586	.003319	0.0175	1050
10-32 0.190	UNF	.0009	.1891	.1831	.1688	.1658	.003004	0.0200	1200
12-24 0.216	UNC	.0010	.2150	.2078	.1879	.1845	.003400	0.0242	1450
12-28 0.216	UNF	.0010	.2150	.2085	.1918	.1886	.003224	0.0258	1548
1/4-20 0.250	UNC	.0011	.2489	.2408	.2164	.2127	.003731	0.0318	1900
1/4-28 0.250	UNF	.0010	.2490	.2425	.2258	.2225	.003322	0.0364	2200
5/16-18 0.3125	UNC	.0012	.3113	.3026	.2752	.2712	.004041	0.0524	3150
5/16-24 0.3125	UNF	.0011	.3114	.3042	.2843	.2806	.003660	0.0580	3480
3/8-16 0.375	UNC	.0013	.3737	.3643	.3331	.3287	.004363	0.0775	4650
3/8-24 0.375	UNF	.0011	.3739	.3667	.3468	.3430	.003804	0.0878	5268
1/2-13 0.500	UNC	.0015	.4985	.4876	.4485	.4435	.004965	0.1419	8500
1/2-20 0.500	UNF	.0013	.4987	.4906	.4662	.4619	.004288	0.1599	9594
Tolerance on Length  L	Nominal Screw Size	Nominal Screw Length							
		Up to 1/2 in., incl.	Over 1/2 to 1 in., incl.	Over 1 to 2 in., incl.	Over 2 in.				
	0 thru 12	-0.02	-0.03	-0.06	-0.09				
	1/4 thru 3/4	-0.03	-0.03	-0.06	-0.09				

<sup>a</sup> Tensile strength values are based on 60,000 psi. and apply to carbon steel screws and SEMS only. Hex and Hex Washer head machine screws of sufficient length may be wedge tensile tested. Other head styles may be axial tensile tested.