

Critical Diameters and their Corresponding Stress Areas

Screw Size	Pitch	Major Diameter (Maximum)	Major Diameter Stress Area	Pitch Diameter (Nominal)	Pitch Diameter Stress Area	Minor Diameter (Nominal)	Minor Diameter Stress Area	Weight per inch (Steel)	Weight per foot (Steel)
2-56	56	0.0730	0.0024	0.072	0.0023	0.0702	0.0022	0.0012	0.0140
4-40	40	0.1120	0.0060	0.094	0.0038	0.0894	0.0033	0.0020	0.0240
5-40	40	0.1250	0.0080	0.107	0.0054	0.1021	0.0047	0.0026	0.0310
6-32	32	0.1380	0.0091	0.116	0.0057	0.1090	0.0048	0.0030	0.0360
8-32	32	0.1640	0.0140	0.142	0.0098	0.1345	0.0085	0.0045	0.0540
10	24	0.1900	0.0175	0.160	0.0112	0.1505	0.0095	0.0058	0.0690
	32	0.1900	0.0200	0.167	0.0146	0.1600	0.0132	0.0063	0.0750
12-24	24	0.2160	0.0242	0.187	0.0168	0.1760	0.0144	0.0078	0.0940
1/4	20	0.2500	0.0318	0.212	0.0209	0.2015	0.0183	0.0100	0.1200
	27	0.2500	0.0359	0.223	0.0274	0.2145	0.0250	0.0111	0.1328
	28	0.2500	0.0364	0.224	0.0281	0.2165	0.0259	0.0112	0.1340
5/16	18	0.3125	0.0524	0.272	0.0373	0.2585	0.0328	0.0165	0.1980
	24	0.3125	0.0581	0.282	0.0458	0.2720	0.0421	0.0178	0.2130
3/8	16	0.3750	0.0775	0.330	0.0569	0.3140	0.0503	0.0243	0.2910
	24	0.3750	0.0878	0.345	0.0728	0.3350	0.0681	0.0265	0.3180
7/16	14	0.4375	0.1063	0.388	0.0796	0.3680	0.0699	0.0335	0.4020
	20	0.4375	0.1187	0.402	0.0980	0.3890	0.0909	0.0360	0.4320
1/2	13	0.5000	0.1419	0.444	0.1070	0.4255	0.0965	0.0439	0.5270
	20	0.5000	0.1600	0.464	0.1355	0.4515	0.1274	0.0479	0.5750
9/16	12	0.5625	0.1819	0.504	0.1404	0.4810	0.1255	0.0566	0.6790
	18	0.5625	0.2030	0.523	0.1727	0.5085	0.1621	0.0609	0.7310
5/8	11	0.6250	0.2260	0.562	0.1760	0.5365	0.1576	0.0703	0.8440
	18	0.6250	0.2560	0.585	0.2213	0.5715	0.2102	0.0762	0.9140
3/4	10	0.7500	0.3345	0.680	0.2666	0.6525	0.2420	0.1029	1.2350
	16	0.7500	0.3730	0.705	0.3258	0.6890	0.3099	0.1106	1.3270
7/8	9	0.8750	0.4617	0.799	0.3747	0.7665	0.3403	0.1421	1.7050
	14	0.8750	0.5095	0.824	0.4470	0.8060	0.4259	0.1511	1.8130
1	8	1.0000	0.6057	0.915	0.4942	0.8775	0.4485	0.1863	2.236
	12	1.0000	0.6630	0.941	0.5806	0.9190	0.5513	0.1955	2.346
	14	1.0000	0.6799	0.949	0.6074	0.9305	0.5821	0.2004	2.405
1 1/8	7	1.1250	0.7633	1.026	0.6177	0.9840	0.5605	0.1756	2.811
	8	1.1250	0.7905	1.038	0.6593	1.0025	0.6092	0.2398	2.877
	12	1.1250	0.8557	1.066	0.7617	1.0440	0.7281	0.2528	3.034
1 1/4	7	1.2500	0.9691	1.151	0.8041	1.1090	0.7387	0.2948	3.537
	8	1.2500	0.9997	1.163	0.8515	1.1275	0.7944	0.3015	3.618
	12	1.2500	1.0729	1.191	0.9674	1.1690	0.9294	0.3156	3.787
1 3/8	6	1.3750	1.1549	1.26	0.9462	1.2100	0.8620	0.3527	4.232
	8	1.3750	1.2335	1.288	1.0682	1.2525	1.0041	0.3686	4.423
	12	1.3750	1.3147	1.316	1.1975	1.2940	1.1552	0.3853	4.624
1 1/2	6	1.5000	1.4053	1.385	1.1740	1.3350	1.0799	0.4268	5.122
	8	1.5000	1.4918	1.414	1.3115	1.3775	1.2384	0.4448	5.338
	12	1.5000	1.5810	1.441	1.4523	1.4190	1.4057	0.4620	5.544
1 5/8	6	1.6250	1.6802	1.501	1.4074	1.4600	1.3225	0.5013	6.016
	8	1.6250	1.7747	1.538	1.5752	1.5025	1.4973	0.5263	6.316
	12	1.6250	1.8719	1.566	1.7315	1.5440	1.6806	0.5457	6.548
1 3/4	5	1.7500	1.8995	1.613	1.5795	1.5510	1.4444	0.5789	6.947
	8	1.7500	2.0822	1.663	1.8656	1.6275	1.7806	0.6153	7.384
	12	1.7500	2.1873	1.691	2.0354	1.6690	1.9801	0.6363	7.635
1 7/8	6	1.8750	2.3036	1.738	1.9498	1.7100	1.8811	0.6721	8.065
	8	1.8750	2.4141	1.785	2.1726	1.7525	2.0886	0.7113	8.536
	12	1.8750	2.5272	1.816	2.3637	1.7940	2.3041	0.7338	8.805
2	4 1/2	2.0000	2.4982	1.848	2.0905	1.7770	1.9125	0.7598	9.118
	8	2.0000	2.7706	1.912	2.5171	1.8775	2.4210	0.8134	9.761
	12	2.0000	2.8917	1.941	2.7166	1.9190	2.6527	0.8383	10.059