

Wire Table

AWG Wire Size	Resistance Ω /meter	Wire O.D. (cm) Heavy Build	Wire Area cm^2	Current Capacity, Amps (listed by columns of Amps/ cm^2)				
				200	400	500	600	800
6	.00130	.421	0.1392	26.6	53.2	66.5	79.8	106
7	.00163	.376	0.1110	21.1	42.2	52.8	63.3	84.4
8	.00206	.336	0.0887	16.7	33.5	41.8	50.2	66.9
9	.00260	.299	0.0702	13.3	26.5	33.2	39.8	53.1
10	.00328	.267	0.0560	10.5	21.0	26.3	31.6	42.1
11	.00414	.238	0.0445	8.34	16.7	20.8	25.0	33.3
12	.00521	.213	0.0356	6.62	13.2	16.5	19.8	26.5
13	.00656	.1902	0.0284	5.25	10.5	13.1	15.8	21.0
14	.00828	.1715	0.0231	4.16	8.33	10.4	12.5	16.7
15	.01044	.1529	0.01840	3.30	6.61	8.26	9.91	13.2
16	.01319	.1369	0.01472	2.62	5.23	6.54	7.85	10.5
17	.01658	.1224	0.01177	2.08	4.16	5.20	6.24	8.32
18	.02095	.1095	0.00942	1.65	3.29	4.11	4.94	6.58
19	.02640	.0980	0.00754	1.31	2.61	3.27	3.92	5.22
20	.03323	.0879	0.00607	1.04	2.08	2.59	3.11	4.15
21	.04190	.0785	0.00484	0.823	1.65	2.06	2.47	3.29
22	.05315	.0701	0.00386	0.649	1.30	1.62	1.95	2.59
23	.06663	.0632	0.00314	0.518	1.04	1.29	1.55	2.07
24	.08422	.0566	0.00252	0.409	0.819	1.0236	1.23	1.64
25	.10620	.0505	0.00200	0.325	0.649	0.812	0.974	1.30
26	.13458	.0452	0.00160	0.256	0.512	0.641	0.769	1.02
27	.16873	.0409	0.00131	0.204	0.409	0.511	0.613	0.817
28	0.214	.0366	0.00105	0.161	0.322	0.402	0.483	0.644
29	0.266	.0330	0.000855	0.129	0.259	0.324	0.388	0.518
30	0.340	.0295	0.000683	0.101	0.203	0.253	0.304	0.405
31	0.429	.0267	0.000560	0.0803	0.161	0.201	0.241	0.321
32	0.532	.0241	0.000456	0.0649	0.130	0.162	0.195	0.259
33	0.675	.0216	0.000366	0.0511	0.102	0.128	0.153	0.204
34	0.857	.01905	0.000285	0.0402	0.0804	0.101	0.121	0.161
35	1.085	.01702	0.000228	0.0318	0.0636	0.0795	0.0953	0.127
36	1.361	.01524	0.000182	0.0253	0.0507	0.0633	0.0760	0.101
37	1.680	.01397	0.000153	0.0205	0.0410	0.0513	0.0616	0.0821
38	2.13	.01245	0.000122	0.0162	0.0324	0.0405	0.0486	0.0649
39	2.78	.01092	0.000094	0.0124	0.0248	0.0310	0.0372	0.0497
40	3.54	.00965	0.000073	0.00974	0.0195	0.0243	0.0292	0.0390
41	4.34	.00864	0.000059	0.00795	0.0159	0.0199	0.0238	0.0318
42	5.44	.00762	0.000046	0.00633	0.0127	0.0158	0.0190	0.0253
43	7.03	.00686	0.000037	0.00490	0.00981	0.0123	0.0147	0.0196
44	8.51	.00635	0.000032	0.00405	0.00811	0.0101	0.0122	0.0162
45	10.98	.00546	0.000023	0.00314	0.00628	0.00785	0.00942	0.0126
46	13.80	.00498	0.000019	0.00250	0.00500	0.00624	0.00749	0.00999
47	17.36	.00452	0.000016	0.00199	0.00397	0.00497	0.00596	0.00795
48	22.10	.00394	0.000012	0.00156	0.00312	0.00390	0.00467	0.00623
49	27.60	.00353	0.000010	0.00125	0.00250	0.00312	0.00375	0.00499