

**銅線導體電氣規格特性參考：**

**This estimate is based on nick-free soft annealed Cu wire having a tensile strength of 37000 pounds per square inch.**

AWG gauge	Conductor Diameter Inches	Conductor Diameter mm	Conductor cross section in mm <sup>2</sup>	Ohms per 1000 ft.	Ohms per km	Maximum amps for chassis wiring	Maximum amps for power transmission	Maximum frequency for 100% skin depth for solid conductor copper	Breaking force Soft Annealed Cu 37000 PSI
4/0	0.46	11.684	107	0.049	0.16072	380	302	125 Hz	6120 lbs
3/0	0.4096	10.40384	84.9	0.0618	0.202704	328	239	160 Hz	4860 lbs
2/0	0.3648	9.26592	67.4	0.0779	0.255512	283	190	200 Hz	3860 lbs
0	0.3249	8.25246	53.5	0.0983	0.322424	245	150	250 Hz	3060 lbs
1	0.2893	7.34822	42.4	0.1239	0.406392	211	119	325 Hz	2430 lbs
2	0.2576	6.54304	33.6	0.1563	0.512664	181	94	410 Hz	1930 lbs
3	0.2294	5.82676	26.7	0.197	0.64616	158	75	500 Hz	1530 lbs
4	0.2043	5.18922	21.1	0.2485	0.81508	135	60	650 Hz	1210 lbs
5	0.1819	4.62026	16.8	0.3133	1.027624	118	47	810 Hz	960 lbs
6	0.162	4.1148	13.3	0.3951	1.295928	101	37	1100 Hz	760 lbs
7	0.1443	3.66522	10.6	0.4982	1.634096	89	30	1300 Hz	605 lbs
8	0.1285	3.2639	8.37	0.6282	2.060496	73	24	1650 Hz	480 lbs
9	0.1144	2.90576	6.63	0.7921	2.598088	64	19	2050 Hz	380 lbs
10	0.1019	2.58826	5.26	0.9989	3.276392	55	15	2600 Hz	314 lbs
11	0.0907	2.30378	4.17	1.26	4.1328	47	12	3200 Hz	249 lbs
12	0.0808	2.05232	3.31	1.588	5.20864	41	9.3	4150 Hz	197 lbs
13	0.072	1.8288	2.63	2.003	6.56984	35	7.4	5300 Hz	150 lbs
14	0.0641	1.62814	2.08	2.525	8.282	32	5.9	6700 Hz	119 lbs
15	0.0571	1.45034	1.65	3.184	10.44352	28	4.7	8250 Hz	94 lbs
16	0.0508	1.29032	1.31	4.016	13.17248	22	3.7	11 k Hz	75 lbs
17	0.0453	1.15062	1.04	5.064	16.60992	19	2.9	13 k Hz	59 lbs
18	0.0403	1.02362	0.823	6.385	20.9428	16	2.3	17 kHz	47 lbs
19	0.0359	0.91186	0.653	8.051	26.40728	14	1.8	21 kHz	37 lbs
20	0.032	0.8128	0.519	10.15	33.292	11	1.5	27 kHz	29 lbs
21	0.0285	0.7239	0.412	12.8	41.984	9	1.2	33 kHz	23 lbs
22	0.0253	0.64516	0.327	16.14	52.9392	7	0.92	42 kHz	18 lbs
23	0.0226	0.57404	0.259	20.36	66.7808	4.7	0.729	53 kHz	14.5 lbs
24	0.0201	0.51054	0.205	25.67	84.1976	3.5	0.577	68 kHz	11.5 lbs
25	0.0179	0.45466	0.162	32.37	106.1736	2.7	0.457	85 kHz	9 lbs
26	0.0159	0.40386	0.128	40.81	133.8568	2.2	0.361	107 kHz	7.2 lbs
27	0.0142	0.36068	0.102	51.47	168.8216	1.7	0.288	130 kHz	5.5 lbs
28	0.0126	0.32004	0.08	64.9	212.872	1.4	0.226	170 kHz	4.5 lbs
29	0.0113	0.28702	0.0647	81.83	268.4024	1.2	0.182	210 kHz	3.6 lbs
30	0.01	0.254	0.0507	103.2	338.496	0.86	0.142	270 kHz	2.75 lbs
31	0.0089	0.22606	0.0401	130.1	426.728	0.7	0.113	340 kHz	2.25 lbs
32	0.008	0.2032	0.0324	164.1	538.248	0.53	0.091	430 kHz	1.8 lbs
Metric 2.0	0.00787	0.2	0.0314	169.39	555.61	0.51	0.088	440 kHz	
33	0.0071	0.18034	0.0255	206.9	678.632	0.43	0.072	540 kHz	1.3 lbs
Metric 1.8	0.00709	0.18	0.0254	207.5	680.55	0.43	0.072	540 kHz	
34	0.0063	0.16002	0.0201	260.9	855.752	0.33	0.056	690 kHz	1.1 lbs
Metric 1.6	0.0063	0.16002	0.0201	260.9	855.752	0.33	0.056	690 kHz	
35	0.0056	0.14224	0.0159	329	1079.12	0.27	0.044	870 kHz	0.92 lbs
Metric 1.4	0.00551	0.14	0.0154	339	1114	0.26	0.043	900 kHz	
36	0.005	0.127	0.0127	414.8	1360	0.21	0.035	1100 kHz	0.72 lbs
Metric 1.25	0.00492	0.125	0.0123	428.2	1404	0.2	0.034	1150 kHz	
37	0.0045	0.1143	0.0103	523.1	1715	0.17	0.0289	1350 kHz	0.57 lbs
Metric 1.12	0.00441	0.112	0.00985	533.8	1750	0.163	0.0277	1400 kHz	
38	0.004	0.1016	0.00811	659.6	2163	0.13	0.0228	1750 kHz	0.45 lbs
Metric 1	0.00394	0.1	0.00785	670.2	2198	0.126	0.0225	1750 kHz	
39	0.0035	0.0889	0.00621	831.8	2728	0.11	0.0175	2250 kHz	0.36 lbs
40	0.0031	0.07874	0.00487	1049	3440	0.09	0.0137	2900 kHz	0.29 lbs