

AWG gauge	Conductor Diameter Inches	Conductor Diameter mm	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
0000	0.46	11.684	0.049	0.16072	380	302	125 Hz
000	0.4096	10.40384	0.0618	0.202704	328	239	160 Hz
00	0.3648	9.26592	0.0779	0.255512	283	190	200 Hz
0	0.3249	8.25246	0.0983	0.322424	245	150	250 Hz
1	0.2893	7.34822	0.1239	0.406392	211	119	325 Hz
2	0.2576	6.54304	0.1563	0.512664	181	94	410 Hz
3	0.2294	5.82676	0.197	0.64616	158	75	500 Hz
4	0.2043	5.18922	0.2485	0.81508	135	60	650 Hz
5	0.1819	4.62026	0.3133	1.027624	118	47	810 Hz
6	0.162	4.1148	0.3951	1.295928	101	37	1100 Hz
7	0.1443	3.66522	0.4982	1.634096	89	30	1300 Hz
8	0.1285	3.2639	0.6282	2.060496	73	24	1650 Hz
9	0.1144	2.90576	0.7921	2.598088	64	19	2050 Hz
10	0.1019	2.58826	0.9989	3.276392	55	15	2600 Hz
11	0.0907	2.30378	1.26	4.1328	47	12	3200 Hz
12	0.0808	2.05232	1.588	5.20864	41	9.3	4150 Hz
13	0.072	1.8288	2.003	6.56984	35	7.4	5300 Hz
14	0.0641	1.62814	2.525	8.282	32	5.9	6700 Hz
15	0.0571	1.45034	3.184	10.44352	28	4.7	8250 Hz
16	0.0508	1.29032	4.016	13.17248	22	3.7	11 k Hz
17	0.0453	1.15062	5.064	16.60992	19	2.9	13 k Hz
18	0.0403	1.02362	6.385	20.9428	16	2.3	17 kHz
19	0.0359	0.91186	8.051	26.40728	14	1.8	21 kHz
20	0.032	0.8128	10.15	33.292	11	1.5	27 kHz
21	0.0285	0.7239	12.8	41.984	9	1.2	33 kHz
22	0.0254	0.64516	16.14	52.9392	7	0.92	42 kHz
23	0.0226	0.57404	20.36	66.7808	4.7	0.729	53 kHz
24	0.0201	0.51054	25.67	84.1976	3.5	0.577	68 kHz
25	0.0179	0.45466	32.37	106.1736	2.7	0.457	85 kHz
26	0.0159	0.40386	40.81	133.8568	2.2	0.361	107 kHz
27	0.0142	0.36068	51.47	168.8216	1.7	0.288	130 kHz
28	0.0126	0.32004	64.9	212.872	1.4	0.226	170 kHz
29	0.0113	0.28702	81.83	268.4024	1.2	0.182	210 kHz
30	0.01	0.254	103.2	338.496	0.86	0.142	270 kHz

Wire Size Chart

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INCH MM



31	0.0089	0.22606	130.1	426.728	0.7	0.113	340 kHz
32	0.008	0.2032	164.1	538.248	0.53	0.091	430 kHz
Metric 2.0	0.00787	0.200	169.39	555.61	0.51	0.088	440 kHz
33	0.0071	0.18034	206.9	678.632	0.43	0.072	540 kHz
Metric 1.8	0.00709	0.180	207.5	680.55	0.43	0.072	540 kHz
34	0.0063	0.16002	260.9	855.752	0.33	0.056	690 kHz
Metric 1.6	0.0063	0.16002	260.9	855.752	0.33	0.056	690 kHz
35	0.0056	0.14224	329	1079.12	0.27	0.044	870 kHz
Metric 1.4	.00551	.140	339	1114	0.26	0.043	900 kHz
36	0.005	0.127	414.8	1360	0.21	0.035	1100 kHz
Metric 1.25	.00492	0.125	428.2	1404	0.20	0.034	1150 kHz
37	0.0045	0.1143	523.1	1715	0.17	0.0289	1350 kHz
Metric 1.12	.00441	0.112	533.8	1750	0.163	0.0277	1400 kHz
38	0.004	0.1016	659.6	2163	0.13	0.0228	1750 kHz
Metric 1	.00394	0.1000	670.2	2198	0.126	0.0225	1750 kHz
39	0.0035	0.0889	831.8	2728	0.11	0.0175	2250 kHz
40	0.0031	0.07874	1049	3440	0.09	0.0137	2900 kHz