| AWG gauge | Conductor Diameter mm | Ohms per km | Maximum amps for chassis wiring | Maximum amps for power transmission | Maximum frequency for 100% skin depth for solid conductor copper |
|---|---|---|---|---|---|
| OOOO | 11.684 | 0.16072 | 380 | 302 | 125 Hz |
| OOO | 10.40384 | 0.202704 | 328 | 239 | 160 Hz |
| OO | 9.26592 | 0.255512 | 283 | 190 | 200 Hz |
| 0 | 8.25246 | 0.322424 | 245 | 150 | 250 Hz |
| 1 | 7.34822 | 0.406392 | 211 | 119 | 325 Hz |
| 2 | 6.54304 | 0.512664 | 181 | 94 | 410 Hz |
| 3 | 5.82676 | 0.64616 | 158 | 75 | 500 Hz |
| 4 | 5.18922 | 0.81508 | 135 | 60 | 650 Hz |
| 5 | 4.62026 | 1.027624 | 118 | 47 | 810 Hz |
| 6 | 4.1148 | 1.295928 | 101 | 37 | 1100 Hz |
| 7 | 3.66522 | 1.634096 | 89 | 30 | 1300 Hz |
| 8 | 3.2639 | 2.060496 | 73 | 24 | 1650 Hz |
| 9 | 2.90576 | 2.598088 | 64 | 19 | 2050 Hz |
| 10 | 2.58826 | 3.276392 | 55 | 15 | 2600 Hz |
| 11 | 2.30378 | 4.1328 | 47 | 12 | 3200 Hz |
| 12 | 2.05232 | 5.20864 | 41 | 9.3 | 4150 Hz |
| 13 | 1.8288 | 6.56984 | 35 | 7.4 | 5300 Hz |
| 14 | 1.62814 | 8.282 | 32 | 5.9 | 6700 Hz |
| 15 | 1.45034 | 10.44352 | 28 | 4.7 | 8250 Hz |
| 16 | 1.29032 | 13.17248 | 22 | 3.7 | 11 k Hz |
| 17 | 1.15062 | 16.60992 | 19 | 2.9 | 13 k Hz |
| 18 | 1.02362 | 20.9428 | 16 | 2.3 | 17 kHz |
| 19 | 0.91186 | 26.40728 | 14 | 1.8 | 21 kHz |
| 20 | 0.8128 | 33.292 | 11 | 1.5 | 27 kHz |
| 21 | 0.7239 | 41.984 | 9 | 1.2 | 33 kHz |
| 22 | 0.64516 | 52.9392 | 7 | 0.92 | 42 kHz |
| 23 | 0.57404 | 66.7808 | 4.7 | 0.729 | 53 kHz |
| 24 | 0.51054 | 84.1976 | 3.5 | 0.577 | 68 kHz |
| 25 | 0.45466 | 106.1736 | 2.7 | 0.457 | 85 kHz |
| 26 | 0.40386 | 133.8568 | 2.2 | 0.361 | 107 kH |
| 27 | 0.36068 | 168.8216 | 1.7 | 0.288 | 130 kHz |
| 28 | 0.32004 | 212.872 | 1.4 | 0.226 | 170 kHz |
| 29 | 0.28702 | 268.4024 | 1.2 | 0.182 | 210 kHz |

| | | | | | |
|---|---|---|---|---|---|
| 30 | 0.254 | 338.496 | 0.86 | 0.142 | 270 kHz |
| 31 | 0.22606 | 426.728 | 0.7 | 0.113 | 340 kHz |
| 32 | 0.2032 | 538.248 | 0.53 | 0.091 | 430 kHz |
| Metric 2.0 | 0.200 | 555.61 | 0.51 | 0.088 | 440 kHz |
| 33 | 0.18034 | 678.632 | 0.43 | 0.072 | 540 kHz |
| Metric 1.8 | 0.180 | 680.55 | 0.43 | 0.072 | 540 kHz |
| 34 | 0.16002 | 855.752 | 0.33 | 0.056 | 690 kHz |
| Metric 1.6 | 0.16002 | 855.752 | 0.33 | 0.056 | 690 kHz |
| 35 | 0.14224 | 1079.12 | 0.27 | 0.044 | 870 kHz |
| Metric 1.4 | .140 | 1114 | 0.26 | 0.043 | 900 kHz |
| 36 | 0.127 | 1360 | 0.21 | 0.035 | 1100 kHz |
| Metric 1.25 | 0.125 | 1404 | 0.20 | 0.034 | 1150 kHz |
| 37 | 0.1143 | 1715 | 0.17 | 0.0289 | 1350 kHz |
| Metric 1.12 | 0.112 | 1750 | 0.163 | 0.0277 | 1400 kHz |
| 38 | 0.1016 | 2163 | 0.13 | 0.0228 | 1750 kHz |
| Metric 1 | 0.1000 | 2198 | 0.126 | 0.0225 | 1750 kHz |
| 39 | 0.0889 | 2728 | 0.11 | 0.0175 | 2250 kHz |
| 40 | 0.07874 | 3440 | 0.09 | 0.0137 | 2900 kHz |