

# Wire Gauge Chart

Every size from 4/0 through 40 AWG, with no gaps. Includes 16–22 AWG for speaker and 12 V work.

| AWG  | DIAMETER |        | AREA          |                 |
|------|----------|--------|---------------|-----------------|
|      | IN       | MM     | CIRCULAR MILS | MM <sup>2</sup> |
| 0000 | 0.4600   | 11.684 | 211,600.0     | 107.2193        |
| 000  | 0.4096   | 10.405 | 167,806.4     | 85.0288         |
| 00   | 0.3648   | 9.266  | 133,076.5     | 67.4309         |
| 0    | 0.3249   | 8.251  | 105,534.5     | 53.4751         |
| 1    | 0.2893   | 7.348  | 83,692.7      | 42.4077         |
| 2    | 0.2576   | 6.544  | 66,371.3      | 33.6308         |
| 3    | 0.2294   | 5.827  | 52,634.8      | 26.6705         |
| 4    | 0.2043   | 5.189  | 41,741.3      | 21.1506         |
| 5    | 0.1819   | 4.621  | 33,102.4      | 16.7732         |
| 6    | 0.1620   | 4.115  | 26,251.4      | 13.3018         |
| 7    | 0.1443   | 3.665  | 20,818.3      | 10.5488         |
| 8    | 0.1285   | 3.264  | 16,509.7      | 8.3656          |
| 9    | 0.1144   | 2.906  | 13,092.7      | 6.6342          |
| 10   | 0.1019   | 2.588  | 10,383.0      | 5.2612          |
| 11   | 0.0907   | 2.305  | 8,234.1       | 4.1723          |
| 12   | 0.0808   | 2.053  | 6,529.9       | 3.3088          |
| 13   | 0.0720   | 1.828  | 5,178.5       | 2.6240          |
| 14   | 0.0641   | 1.628  | 4,106.7       | 2.0809          |
| 15   | 0.0571   | 1.450  | 3,256.8       | 1.6502          |
| 16   | 0.0508   | 1.291  | 2,582.7       | 1.3087          |
| 17   | 0.0453   | 1.150  | 2,048.2       | 1.0378          |
| 18   | 0.0403   | 1.024  | 1,624.3       | 0.8230          |

| AWG | DIAMETER |       | AREA          |                 |
|-----|----------|-------|---------------|-----------------|
|     | IN       | MM    | CIRCULAR MILS | MM <sup>2</sup> |
| 19  | 0.0359   | 0.912 | 1,288.1       | 0.6527          |
| 20  | 0.0320   | 0.812 | 1,021.5       | 0.5176          |
| 21  | 0.0285   | 0.723 | 810.1         | 0.4105          |
| 22  | 0.0253   | 0.644 | 642.4         | 0.3255          |
| 23  | 0.0226   | 0.573 | 509.5         | 0.2582          |
| 24  | 0.0201   | 0.511 | 404.0         | 0.2047          |
| 25  | 0.0179   | 0.455 | 320.4         | 0.1624          |
| 26  | 0.0159   | 0.405 | 254.1         | 0.1288          |
| 27  | 0.0142   | 0.361 | 201.5         | 0.1021          |
| 28  | 0.0126   | 0.321 | 159.8         | 0.0810          |
| 29  | 0.0113   | 0.286 | 126.7         | 0.0642          |
| 30  | 0.0100   | 0.255 | 100.5         | 0.0509          |
| 31  | 0.0089   | 0.227 | 79.7          | 0.0404          |
| 32  | 0.0080   | 0.202 | 63.2          | 0.0320          |
| 33  | 0.0071   | 0.180 | 50.1          | 0.0254          |
| 34  | 0.0063   | 0.160 | 39.8          | 0.0201          |
| 35  | 0.0056   | 0.143 | 31.5          | 0.0160          |
| 36  | 0.0050   | 0.127 | 25.0          | 0.0127          |
| 37  | 0.0045   | 0.113 | 19.8          | 0.0100          |
| 38  | 0.0040   | 0.101 | 15.7          | 0.0080          |
| 39  | 0.0035   | 0.090 | 12.5          | 0.0063          |
| 40  | 0.0031   | 0.080 | 9.9           | 0.0050          |

AWG, Diameter in, Diameter mm → AWG geometric series (definition)

Diameter mm, Area circular mils, Area mm<sup>2</sup> → Area identities (definition)

AWG, Diameter in → NBS Circular 31, Copper Wire Tables

Diameter in, Area circular mils → ASTM B258-18

Nominal dimensions for solid conductor. Stranded conductor of the same AWG has the same conductor area but a larger overall diameter. · Solid conductor, nominal

[workshopcharts.com/wire-gauge-chart/](http://workshopcharts.com/wire-gauge-chart/) · last checked 2026-08-17 · manufacturer figures for a specific assembly govern