



Bare Copper Wire and Cable

Solid and Stranded

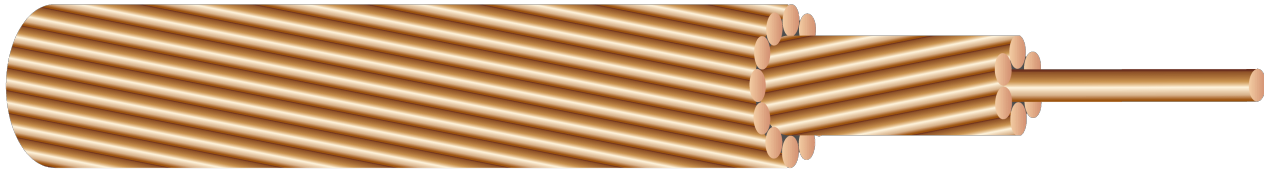


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

Bare copper, solid or stranded.

Available in tempers hard, medium-hard, or soft.

Stranded conductors are concentrically stranded in hard and medium-hard tempers and are Combination Unilay stranded in the soft-drawn temper.

APPLICATIONS AND FEATURES:

Solid and stranded (classes AA and A) bare copper are suitable for overhead transmission and distribution applications.

Stranded conductor of greater flexibility (classes B and C) are suitable for uninsulated hook up, jumpers, and grounds in electrical construction. Soft Drawn copper is unilay construction.

SPECIFICATIONS:

- ASTM B1 Hard-Drawn Copper
- ASTM B2 Medium-Hard Drawn Copper Wire
- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire



Stranded

| Stock Number | Size | Stranding | Stranding Class | Weight | Individual Wires Diameter | Complete Conductor Diameter | Hard Drawn: Rated Strength | Hard Drawn: DC Resistance @ 20°C | Medium-Hard Drawn: Rated Strength | Medium-Hard Drawn: DC Resistance @ 20°C | Soft-Drawn (Annealed): Rated Strength | Soft-Drawn (Annealed): DC Resistance @ 20°C | Allowable Ampacity+ |
|--------------|------|-----------|-----------------|-----------|---------------------------|-----------------------------|----------------------------|----------------------------------|-----------------------------------|---|---------------------------------------|---|---------------------|
| | AWG | | | lbs/1000' | mils | mils | lbs | ohms/1000' | lbs | ohms/1000' | lbs | ohms/1000' | |
| | 8 | 7 | B | 51 | 49 | 146 | 777 | 0.6663 | 610 | 0.6629 | 499 | 0.6408 | 95 |
| | 6 | 7 | B | 81 | 61 | 184 | 1228 | 0.4191 | 959 | 0.4169 | 794 | 0.403 | 130 |
| | 4 | 7 | A, B | 128.9 | 77 | 232 | 1938 | 0.2636 | 1505 | 0.2622 | 1320 | 0.2534 | 170 |
| | 3 | 7 | A, B | 162.5 | 87 | 260 | 2433 | 0.209 | 1885 | 0.2079 | 1670 | 0.201 | 200 |
| | 2 | 7 | A, B | 204.9 | 97 | 292 | 3050 | 0.166 | 2360 | 0.165 | 2110 | 0.1578 | 230 |
| | 1 | 7 | A | 258.4 | 109 | 328 | 3801 | 0.1316 | 2955 | 0.1309 | 2552 | 0.1252 | 265 |
| | 1/0 | 7 | A, AA | 326.1 | 123 | 368 | 4752 | 0.1042 | 3705 | 0.1037 | 3221 | 0.1002 | 310 |
| | 2/0 | 7 | A, AA | 410.9 | 138 | 414 | 5926 | 0.08267 | 4640 | 0.08224 | 4062 | 0.07949 | 355 |
| | 2/0 | 19 | B | 410.9 | 84 | 418 | 6690 | 0.08267 | 4765 | 0.08224 | 4024 | 0.07949 | 355 |
| | 3/0 | 7 | A, AA | 518.1 | 155 | 464 | 7366 | 0.06556 | 5812 | 0.06522 | 5118 | 0.06304 | 410 |
| | 3/0 | 19 | B | 520 | 101 | 454 | 7648* | 0.0726* | 5653* | 0.0723* | 4819* | 0.06431 | 410 |
| | 4/0 | 7 | A, AA | 653.3 | 174 | 522 | 9154 | 0.05199 | 7278 | 0.05172 | 6459 | 0.04999 | 480 |
| | 4/0 | 19 | B | 653.3 | 106 | 528 | 9617 | 0.05199 | 7479 | 0.05172 | 6453 | 0.04999 | 480 |
| | 250 | 19 | A | 771.9 | 115 | 574 | 11360 | 0.044 | 8836 | 0.04378 | 7627 | 0.04231 | 530 |
| | 250 | 37 | B | 771.9 | 82 | 575 | 11600 | 0.044 | 8952 | 0.04378 | 7940 | 0.04231 | 530 |
| | 300 | 19 | A | 926.2 | 126 | 628 | 13510 | 0.03667 | 10530 | 0.03648 | 9160 | 0.03526 | 590 |
| | 300 | 37 | B | 926.2 | 90 | 630 | 13714 | 0.0353 | 10610 | 0.0353 | 9381 | 0.0353 | 590 |
| | 350 | 19 | A | 1080.6 | 136 | 679 | 15590 | 0.03143 | 12200 | 0.03127 | 10680 | 0.03022 | 650 |
| | 350 | 37 | B | 1080.6 | 97 | 681 | 15620 | 0.0302 | 12287 | 0.0302 | 10773 | 0.0302 | 650 |
| | 500 | 37 | A, B | 1543.8 | 116 | 814 | 22510 | 0.022 | 17550 | 0.02189 | 15240 | 0.02116 | 810 |
| | 600 | 37 | A, AA | 1852.5 | 127 | 891 | 27020 | 0.01834 | 21060 | 0.01825 | 18300 | 0.01763 | 910 |
| | 600 | 61 | B | 1852.5 | 103 | 893 | 27070 | 0.01834 | 21113 | 0.01825 | 18300 | 0.01763 | 910 |
| | 750 | 61 | A, B | 2315.6 | 111 | 998 | 34090 | 0.01467 | 26510 | 0.01459 | 22890 | 0.0141 | 1040 |
| | 1000 | 61 | A, B | 3087.5 | 128 | 1152 | 45030 | 0.011 | 35100 | 0.01094 | 30500 | 0.01058 | 1240 |

+Ampacity based on 75°C conductor temperature; 25°C ambient temperature; 2 ft./sec. wind in sun.

* Interpolated value



Solid

| Size | Weight | Diameter | Circular Mil Area | Hard-Drawn: Rated Strength> | Hard-Drawn: DC Resistance @ 20°C | Medium-Hard Drawn: Rated Strength | Medium-Hard Drawn: DC Resistance @ 20°C | Soft-Drawn (Annealed): Rated Strength | Soft-Drawn (Annealed): DC Resistance @ 20°C | Allowable Ampacity+ |
|------|-----------|----------|-------------------|-----------------------------|----------------------------------|-----------------------------------|---|---------------------------------------|---|---------------------|
| AWG | lbs/1000' | mils | mils | lbs | ohms/1000' | lbs | ohms/1000' | lbs | ohms/1000' | |
| 14 | 12.4 | 64.1 | 4110 | 213.5 | 2.626 | 166.6 | 2.613 | 124.2 | 2.525 | -- |
| 13 | 15.7 | 72 | 5180 | 268 | 2.083 | 208.8 | 2.072 | 156.6 | 2.003 | -- |
| 12 | 19.8 | 80.8 | 6530 | 336.9 | 1.652 | 261.2 | 1.643 | 197.5 | 1.588 | -- |
| 11 | 24.9 | 90.7 | 8230 | 422.9 | 1.31 | 327.6 | 1.303 | 249 | 1.26 | -- |
| 10 | 31.4 | 101.9 | 10380 | 529.2 | 1.039 | 410.4 | 1.033 | 314 | 0.999 | -- |
| 9 | 39.6 | 114.4 | 13090 | 661.2 | 0.824 | 514.2 | 0.82 | 380.5 | 0.792 | -- |
| 8 | 50 | 128.5 | 16510 | 826 | 0.653 | 643.9 | 0.65 | 479.8 | 0.628 | 95 |
| 7 | 63 | 144.3 | 20820 | 1030 | 0.518 | 806.6 | 0.515 | 605 | 0.498 | 105 |
| 6 | 79.4 | 162 | 26240 | 1280 | 0.411 | 1010 | 0.409 | 762.9 | 0.395 | 125 |
| 5 | 100.2 | 181.9 | 33090 | 1591 | 0.326 | 1265 | 0.324 | 961.9 | 0.313 | 145 |
| 4 | 126.3 | 204.3 | 41740 | 1970 | 0.258 | 1584 | 0.257 | 1213 | 0.249 | 170 |
| 3 | 159.3 | 229.4 | 52620 | 2439 | 0.205 | 1984 | 0.204 | 1530 | 0.197 | 195 |
| 2 | 200.9 | 257.6 | 66360 | 3003 | 0.163 | 2450 | 0.162 | 1929 | 0.156 | 225 |
| 1 | 253.3 | 289.3 | 83690 | 3688 | 0.129 | 3024 | 0.128 | 2432 | 0.124 | 260 |

+Ampacity based on 75°C conductor temperature; 25°C ambient temperature; 2 ft./sec. wind in sun.