

CU 2000V XLPE Insulation. RHH/RHW-2 PV

Single Conductor Photovoltaic (Type PV) Power Cable 2000 Volt Copper Conductor XLPE Insulation. Sizes 14 AWG through 1000 Kcmil. Heat, Moisture, Sunlight Resistant RoHS. 90°C

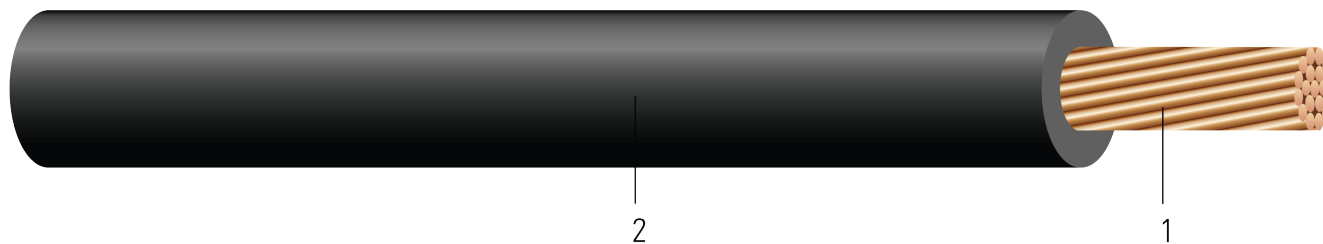


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Stranded bare copper per ASTM B3 and ASTM B8 or ASTM B787
2. **Insulation:** Cross Linked Polyethylene (XLPE). Colors available upon request.

APPLICATIONS AND FEATURES:

Southwire's 2000 Volt power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, aerial supported by a messenger, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B787 19 Wire Combination Unilay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 4703 Standard for Photovoltaic Wire
- Made in America: Compliant with both Buy American and Buy America Act (BAA) requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy America requirements per 49 C.F.R. part 661
- VW-1 Vertical-Wire Flame Test (Optional)

SAMPLE PRINT LEGEND:

SOUTHWIRE E316464 {UL} PV WIRE XX AWG (XXX.XX{mm²}) CU 2000V 90{D}C WET OR DRY -40{D}C SUN RES DIRECT BURIAL VW-1 OR RHW-2 2000V --- RoHS {MMM/DD/YYYY}



Table 1 – Weights and Measurements

| Stock Number | Cond. Size AWG/Kcmil | Strand Count No. of Strands | Diameter Over Conductor inch | Insul. Thickness mil | Approx. OD inch | Copper Weight lb/1000ft | Approx. Weight lb/1000ft |
|--------------|-------------------------|--------------------------------|---------------------------------|-------------------------|--------------------|----------------------------|-----------------------------|
| 597961 | 14 | 19 | 0.070 | 75 | 0.224 | 13 | 30 |
| 597958 | 12 | 19 | 0.088 | 75 | 0.243 | 20 | 39 |
| 579962 | 10 | 19 | 0.113 | 75 | 0.263 | 32 | 53 |
| 569037* | 8 | 19 | 0.134 | 85 | 0.313 | 50 | 79 |
| 569039* | 6 | 19 | 0.169 | 85 | 0.349 | 81 | 114 |
| 569040* | 4 | 19 | 0.212 | 85 | 0.396 | 128 | 166 |
| 569041* | 2 | 19 | 0.268 | 85 | 0.456 | 204 | 250 |
| TBA | 1 | 19 | 0.298 | 105 | 0.508 | 259 | 328 |
| 569043 | 1/0 | 19 | 0.336 | 105 | 0.570 | 326 | 396 |
| 569044 | 2/0 | 19 | 0.376 | 105 | 0.614 | 426 | 504 |
| 569045 | 3/0 | 19 | 0.422 | 105 | 0.664 | 518 | 604 |
| 569047 | 4/0 | 19 | 0.474 | 105 | 0.720 | 655 | 752 |
| 679559 | 250 | 37 | 0.520 | 120 | 0.782 | 772 | 897 |
| 653096 | 300 | 37 | 0.611 | 120 | 0.851 | 926 | 1052 |
| 590138 | 350 | 37 | 0.615 | 120 | 0.901 | 1080 | 1215 |
| 578324 | 500 | 37 | 0.735 | 120 | 1.006 | 1543 | 1685 |
| 672530 | 600 | 61 | 0.812 | 135 | 1.136 | 1852 | 2042 |
| TBA | 750 | 61 | 0.908 | 135 | 1.178 | 2316 | 2546 |
| TBA | 1000 | 61 | 1.060 | 135 | 1.330 | 3086 | 3350 |

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item



Table 2 – Electrical and Engineering Data


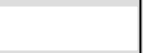



| Stock Number | Cond. Size | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity At 60°C | Allowable Ampacity At 75°C | Allowable Ampacity At 90°C |
|--------------|------------|--------------------|------------------|----------------------|----------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | AWG/Kcmil | inch | lb | Ω/1000ft | Ω/1000ft | Ω/1000ft | Amp | Amp | Amp |
| 597961 | 14 | 1.8 | 33 | 2.631 | 3.423 | 0.058 | 15 | 20 | 25 |
| 597958 | 12 | 1.9 | 52 | 1.630 | 2.002 | 0.054 | 20 | 25 | 30 |
| 579962 | 10 | 2.1 | 83 | 1.020 | 1.250 | 0.050 | 30 | 35 | 40 |
| 569037* | 8 | 2.5 | 132 | 0.654 | 0.787 | 0.052 | 40 | 50 | 55 |
| 569039* | 6 | 2.8 | 210 | 0.411 | 0.495 | 0.051 | 55 | 65 | 75 |
| 569040* | 4 | 3.2 | 334 | 0.258 | 0.310 | 0.048 | 70 | 85 | 95 |
| 569041* | 2 | 3.6 | 531 | 0.162 | 0.195 | 0.045 | 95 | 115 | 130 |
| TBA | 1 | 4.1 | 670 | 0.128 | 0.154 | 0.046 | 110 | 130 | 145 |
| 569043 | 1/0 | 4.6 | 845 | 0.102 | 0.122 | 0.044 | 125 | 150 | 170 |
| 569044 | 2/0 | 4.9 | 1065 | 0.081 | 0.097 | 0.043 | 145 | 175 | 195 |
| 569045 | 3/0 | 5.3 | 1342 | 0.064 | 0.078 | 0.042 | 165 | 200 | 225 |
| 569047 | 4/0 | 5.8 | 1693 | 0.051 | 0.062 | 0.041 | 195 | 230 | 260 |
| 679559 | 250 | 6.2 | 2000 | 0.043 | 0.053 | 0.041 | 215 | 255 | 290 |
| 653096 | 300 | 6.8 | 2400 | 0.036 | 0.047 | 0.029 | 240 | 285 | 320 |
| 590138 | 350 | 7.2 | 2800 | 0.031 | 0.039 | 0.040 | 260 | 310 | 350 |
| 578324 | 500 | 8.0 | 4000 | 0.022 | 0.029 | 0.039 | 320 | 380 | 430 |
| 672530 | 600 | 9.1 | 4800 | 0.018 | 0.025 | 0.039 | 350 | 420 | 475 |
| TBA | 750 | 9.4 | 6000 | 0.014 | 0.022 | 0.038 | 400 | 475 | 535 |
| TBA | 1000 | 10.6 | 8000 | 0.011 | 0.018 | 0.037 | 455 | 545 | 615 |

Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.

Inductive Reactance is based on non-ferrous conduit with one diameter spacing.






*VW-1 Rated

Stock Code Colors

| Size | Black | White | Red | Green | Green/Yellow |
|-----------|---|---|---|---|---|
| AWG/Kcmil |  |  |  |  |  |
| 14 | 597961 | | | | |
| 12 | 597958 | 596376 | 596377 | | |
| 10 | 579962 | 583665 | 583687 | | |
| 1/0 | 569043 | | | | 677562 |
| 2/0 | 569044 | | | | |
| 3/0 | 569045 | | | | |
| 4/0 | 569047 | | | | |
| 250 | 679559 | | | | |
| 300 | 653096 | 599400 | 599401 | | |
| 350 | 590138 | | | | |
| 500 | 578324 | | | | |
| 600 | 672530 | | | | |



Stock Code Colors (VW-1)

| Size | Black | White | Red | Green | Green/Yellow |
|-----------|---|---|---|---|---|
| AWG/Kcmil |  |  |  |  |  |
| 10 | 568110 | | 577645 | | |
| 8 | 569037 | 585080 | 589110 | | |
| 6 | 569039 | | 671956 | 585840 | |
| 4 | 569040 | 673880 | | 653094 | |
| 2 | 569041 | | | | |

