



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:

{SQFTG} SOUTHWIRE E316464 {UL} PV WIRE XX AWG (XX.X{MM2}) CU 2000V 90{D}C WET OR DRY -40{D}C SUN RES DIRECT BURIAL OR RHH-RHW-2 2000V --- RoHS





Table 1 – Weights and Measurements

| Stock Number | Cond. Size AWG/Kcmil | Cond. Number | 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 | 0 | 19 | 0.073 | 75 | 0.224 | 12 | 29 |
| 597958 | 12 | 0 | 19 | 0.088 | 75 | 0.243 | 20 | 39 |
| 579962 | 10 | 1 | 19 | 0.113 | 75 | 0.263 | 32 | 53 |
| 569037* | 8 | 1 | 19 | 0.141 | 85 | 0.313 | 50 | 79 |
| 569039* | 6 | 1 | 19 | 0.177 | 85 | 0.349 | 81 | 114 |
| 569040* | 4 | 1 | 19 | 0.225 | 85 | 0.396 | 128 | 168 |
| 569041* | 2 | 1 | 19 | 0.282 | 85 | 0.456 | 204 | 250 |
| TBA | 1 | 1 | 19 | 0.322 | 105 | 0.532 | 258 | 331 |
| 569043 | 1/0 | 1 | 19 | 0.361 | 105 | 0.570 | 326 | 396 |
| 569044 | 2/0 | 1 | 19 | 0.405 | 105 | 0.614 | 410 | 488 |
| 569045 | 3/0 | 1 | 19 | 0.456 | 105 | 0.664 | 518 | 604 |
| 569047 | 4/0 | 1 | 19 | 0.512 | 105 | 0.720 | 655 | 750 |
| 679559 | 250 | 1 | 37 | 0.558 | 120 | 0.782 | 771 | 879 |
| 653096 | 300 | 1 | 37 | 0.610 | 120 | 0.851 | 926 | 1051 |
| 590138 | 350 | 1 | 37 | 0.661 | 120 | 0.901 | 1080 | 1215 |
| 587813 | 400 | 1 | 37 | 0.706 | 120 | 0.946 | 1235 | 1378 |
| 578324 | 500 | 1 | 37 | 0.789 | 120 | 1.006 | 1543 | 1685 |
| 672530 | 600 | 1 | 61 | 0.865 | 135 | 1.136 | 1852 | 2042 |
| TBA | 750 | 1 | 61 | 0.968 | 135 | 1.238 | 2316 | 2560 |
| 457200 | 1000 | 1 | 61 | 1.117 | 135 | 1.387 | 3088 | 3325 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

*VW-1 Rated

TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.





Table 2 – Electrical and Engineering Data

| Stock Number | Cond. Size | Cond. Number | Min Bending Radius | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity At 75°C | Allowable Ampacity At 90°C |
|--------------|------------|--------------|--------------------|----------------------|----------------------|----------------------------|----------------------------|----------------------------|
| | AWG/Kcmil | | inch | Ω/1000ft | Ω/1000ft | Ω/1000ft | Amp | Amp |
| 597961 | 14 | 0 | 0.9 | 2.631 | 3.170 | 0.058 | 20 | 25 |
| 597958 | 12 | 0 | 1.0 | 1.662 | 2.002 | 0.054 | 25 | 30 |
| 579962 | 10 | 1 | 1.1 | 1.040 | 1.253 | 0.050 | 35 | 40 |
| 569037* | 8 | 1 | 1.3 | 0.653 | 0.786 | 0.052 | 50 | 55 |
| 569039* | 6 | 1 | 1.4 | 0.411 | 0.495 | 0.051 | 65 | 75 |
| 569040* | 4 | 1 | 1.6 | 0.258 | 0.310 | 0.048 | 85 | 95 |
| 569041* | 2 | 1 | 1.8 | 0.162 | 0.195 | 0.045 | 115 | 130 |
| TBA | 1 | 1 | 2.1 | 0.128 | 0.154 | 0.046 | 130 | 145 |
| 569043 | 1/0 | 1 | 2.3 | 0.102 | 0.122 | 0.044 | 150 | 170 |
| 569044 | 2/0 | 1 | 2.5 | 0.081 | 0.097 | 0.043 | 175 | 195 |
| 569045 | 3/0 | 1 | 2.7 | 0.064 | 0.078 | 0.042 | 200 | 225 |
| 569047 | 4/0 | 1 | 2.9 | 0.051 | 0.062 | 0.041 | 230 | 260 |
| 679559 | 250 | 1 | 3.1 | 0.043 | 0.053 | 0.041 | 255 | 290 |
| 653096 | 300 | 1 | 3.4 | 0.036 | 0.045 | 0.041 | 285 | 320 |
| 590138 | 350 | 1 | 3.6 | 0.031 | 0.039 | 0.040 | 310 | 350 |
| 587813 | 400 | 1 | 3.8 | 0.027 | 0.035 | 0.028 | 335 | 380 |
| 578324 | 500 | 1 | 5.0 | 0.022 | 0.029 | 0.039 | 380 | 430 |
| 672530 | 600 | 1 | 5.7 | 0.018 | 0.025 | 0.039 | 420 | 475 |
| TBA | 750 | 1 | 6.2 | 0.014 | 0.022 | 0.038 | 475 | 535 |
| 457200 | 1000 | 1 | 6.9 | 0.011 | 0.018 | 0.037 | 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 center-to-center.

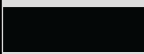
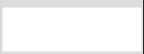



Stock Code Colors

| 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 | | | | |
| 400 | 587813 | | | | |
| 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 | | | | |
| 1000 | 457200 | | | | |

