



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:

- Conductor:** Stranded bare copper per ASTM B3 and ASTM B8 or ASTM B787
- 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

| 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 |
|-------------------------|--------------|--------------------------------|---------------------------------|-------------------------|--------------------|----------------------------|-----------------------------|
| 500 | 1 | 37 | 0.789 | 120 | 1.006 | 1543 | 1685 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

*VW-1 Rated





Table 2 – Electrical and Engineering Data

| Cond. Size | Cond. Number | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity At 75°C | Allowable Ampacity At 90°C |
|------------|--------------|--------------------|------------------|----------------------|----------------------|----------------------------|----------------------------|----------------------------|
| AWG/Kcmil | | inch | lb | Ω/1000ft | Ω/1000ft | Ω/1000ft | Amp | Amp |
| 500 | 1 | 5.0 | 4000 | 0.022 | 0.029 | 0.039 | 380 | 430 |

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 | | | | |

