

# **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

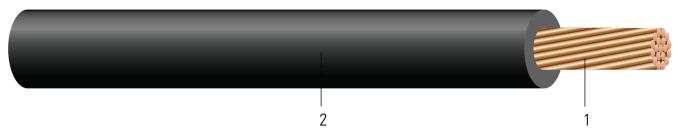


Image not to scale. See Table 1 for dimensions.

#### **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**

| Cond. Size | Strand Count   | Diameter Over Conductor | Insul. Thickness | Approx. OD | Copper Weight | Approx. Weight |
|------------|----------------|-------------------------|------------------|------------|---------------|----------------|
| AWG/Kcmil  | No. of Strands | inch                    | mil              | inch       | lb/1000ft     | lb/1000ft      |
| 12         | 19             | 0.088                   | 75               | 0.243      | 20            | 39             |

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

| Cond.<br>Size | Min Bending<br>Radius | DC Resistance @<br>25°C | AC Resistance @<br>75°C | Inductive Reactance @<br>60Hz | Allowable Ampacity At<br>75°C | Allowable Ampacity At<br>90°C |
|---------------|-----------------------|-------------------------|-------------------------|-------------------------------|-------------------------------|-------------------------------|
| AWG/<br>Kcmil | inch                  | Ω/1000ft                | Ω/1000ft                | Ω/1000ft                      | Amp                           | Amp                           |
| 12            | 1.0                   | 1.662                   | 2.002                   | 0.054                         | 25                            | 30                            |

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 |        |        |        |              |



