

# **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

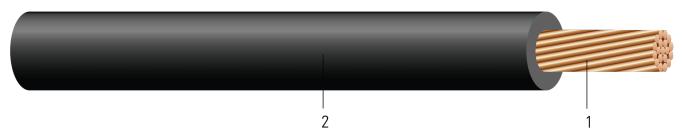


Image not to scale. See Table 1 for dimensions.

## **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:

Non VW-1 Rated:

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

VW-1 Rated:

{SQFTG} SOUTHWIRE E316464 {UL} PV WIRE XX AWG (XX.X{MM2}) CU 2000V 90°C WET OR DRY (-40°C) SUN RES DIRECT BURIAL VW-1 OR RHW-2 2000V---RoHS





# **Table 1 – Weights and Measurements**

Cond. Size	Cond. Number	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
8	1	19	0.141	85	0.313	50	79

All dimensions are nominal and subject to normal manufacturing tolerances

# 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
8	1	1.3	132	0.653	0.786	0.052	50	55

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				



<sup>♦</sup> Cable marked with this symbol is a standard stock item

<sup>\*</sup>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.