



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:

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

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





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.

*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				
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				

