

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

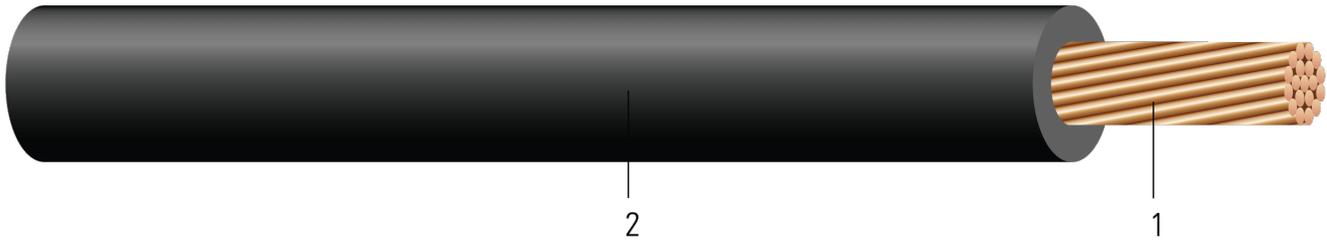


Image not to scale. See Table 1 for dimensions.

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

Stock Number	Cond. Size AWG/Kcmil	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	19	0.073	75	0.224	12	29
597958	12	19	0.088	75	0.243	20	39
579962	10	19	0.113	75	0.263	32	53
569037*	8	19	0.141	85	0.313	50	79
569039*	6	19	0.177	85	0.349	81	114
569040*	4	19	0.225	85	0.396	128	168
138983	2	19	0.286	85	0.456	204	250
TBA	1	19	0.322	105	0.532	258	331
569043	1/0	19	0.361	105	0.570	326	396
569044	2/0	19	0.405	105	0.614	410	488
569045	3/0	19	0.456	105	0.664	518	604
569047	4/0	19	0.512	105	0.720	655	750
679559	250	37	0.558	120	0.782	771	879
653096	300	37	0.610	120	0.851	926	1051
590138	350	37	0.661	120	0.901	1080	1215
587813	400	37	0.706	120	0.946	1235	1378
578324	500	37	0.789	120	1.006	1543	1685
672530	600	61	0.865	135	1.136	1852	2042
588931	750	61	0.968	135	1.238	2316	2524
457200	1000	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	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	0.9	2.631	3.170	0.058	20	25
597958	12	1.0	1.662	2.002	0.054	25	30
579962	10	1.1	1.040	1.253	0.050	35	40
569037*	8	1.3	0.653	0.786	0.052	50	55
569039*	6	1.4	0.411	0.495	0.051	65	75
569040*	4	1.6	0.258	0.310	0.048	85	95
138983	2	1.8	0.162	0.195	0.045	115	130
TBA	1	2.1	0.128	0.154	0.046	130	145
569043	1/0	2.3	0.102	0.122	0.044	150	170
569044	2/0	2.5	0.081	0.097	0.043	175	195
569045	3/0	2.7	0.064	0.078	0.042	200	225
569047	4/0	2.9	0.051	0.062	0.041	230	260
679559	250	3.1	0.043	0.053	0.041	255	290
653096	300	3.4	0.036	0.045	0.041	285	320
590138	350	3.6	0.031	0.039	0.040	310	350
587813	400	3.8	0.027	0.035	0.028	335	380
578324	500	5.0	0.022	0.029	0.039	380	430
672530	600	5.7	0.018	0.025	0.039	420	475
588931	750	6.2	0.014	0.022	0.038	475	535
457200	1000	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		
2	138983				
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				
750	588931		457948		
1000	457200				

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	TBA				

