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

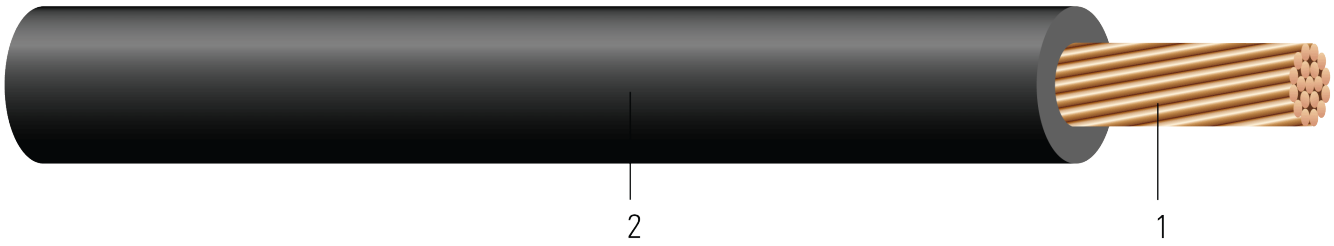

Image not to scale. See Table 1 for dimensions.

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:

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}

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Table 1 – Weights and Measurements

Stock Number	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
597961	14	1	19	0.073	75	0.224	12	29
597958	12	0	19	0.088	75	0.243	20	39
579962	10	1	19	0.113	75	0.263	32	53
569037*	8	1	19	0.141	85	0.313	50	79
569039*	6	1	19	0.177	85	0.349	81	114
569040*	4	1	19	0.225	85	0.396	128	168
569041*	2	1	19	0.282	85	0.456	204	250
TBA	1	1	19	0.322	105	0.532	258	331
569043	1/0	1	19	0.361	105	0.570	326	396
569044	2/0	1	19	0.405	105	0.614	410	488
569045	3/0	1	19	0.456	105	0.664	518	604
569047	4/0	1	19	0.512	105	0.720	655	750
679559	250	1	37	0.558	120	0.782	771	879
653096	300	1	37	0.610	120	0.851	926	1051
590138	350	1	37	0.661	120	0.901	1080	1215
578324	500	1	37	0.789	120	1.006	1543	1685
672530	600	1	61	0.865	135	1.136	1852	2042
TBA	750	1	61	0.968	135	1.238	2316	2560
TBA	1000	1	61	1.117	135	1.387	3088	3365

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item

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Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Cond. Number	Min Bending Radius	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity At 60°C	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
	AWG/ Kcmil		inch	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
597961	14	1	0.9	2.631	3.170	0.058	15	20	25
597958	12	0	1.0	1.662	2.002	0.054	20	25	30
579962	10	1	1.1	1.040	1.253	0.050	30	35	40
569037*	8	1	1.3	0.653	0.786	0.052	40	50	55
569039*	6	1	1.4	0.411	0.495	0.051	55	65	75
569040*	4	1	1.6	0.258	0.310	0.048	70	85	95
569041*	2	1	1.8	0.162	0.195	0.045	95	115	130
TBA	1	1	2.1	0.128	0.154	0.046	110	130	145
569043	1/0	1	2.3	0.102	0.122	0.044	125	150	170
569044	2/0	1	2.5	0.081	0.097	0.043	145	175	195
569045	3/0	1	2.7	0.064	0.078	0.042	165	200	225
569047	4/0	1	2.9	0.051	0.062	0.041	195	230	260
679559	250	1	3.1	0.043	0.053	0.041	215	255	290
653096	300	1	3.4	0.036	0.045	0.041	240	285	320
590138	350	1	3.6	0.031	0.039	0.040	260	310	350
578324	500	1	5.0	0.022	0.029	0.039	320	380	430
672530	600	1	5.7	0.018	0.025	0.039	350	420	475
TBA	750	1	6.2	0.014	0.022	0.038	400	475	535
TBA	1000	1	6.9	0.011	0.018	0.037	455	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.
*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				
500	578324				
600	672530				

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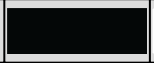
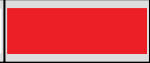
Stock Code Colors (VW-1)

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				