

# 1/C AL 2000V XLPE RHH/RHW-2 Power Cable WHITE SSR™ Type PV

Single Conductor Photovoltaic (Type PV) Power Cable 2000 Volt Aluminum Conductor XLPE Insulation. Sizes 6AWG through 1000 kcmil. Heat, Moisture, and Sunlight Resistant RoHS. 90°C

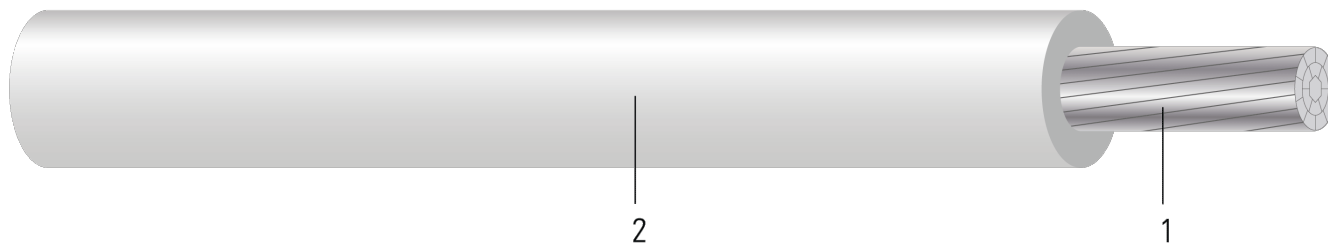


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** AlumaFlex® Compact Stranded Aluminum Alloy (AA-8176)
2. **Insulation:** Southwire's Super Sunlight Resistant (SSR™) Cross-linked Polyethylene (XLPE)

## APPLICATIONS AND FEATURES:

Southwire's new Super Sunlight Resistant – SSR Type PV cables are leading the industry with features such as enhanced UV stability, color permanence and aged physical properties, providing you with the most reliable solutions for your PV wiring systems. The cable is available in sizes 6 AWG through 1000 kcmil. The product is approved for use in solar power applications per the NEC article 690 and is rated 90°C for exposed or concealed wiring in wet or dry locations. Individual conductors are stranded aluminum alloy covered with a cross-linked polyethylene (XLPE) insulation and is rated for direct burial. The cable is sunlight resistant, RoHS compliant, passes -40°C cold bend.

## SPECIFICATIONS:

- ASTM B836 Compact Rounded Stranded Aluminum Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 854 Service Entrance Cable
- UL 4703 Standard for Photovoltaic Wire
- AA 8176 Stranded Aluminum Alloy Conductors

## SAMPLE PRINT LEGEND:

SOUTHWIRE SSRTM E316464 (UL) PV WIRE XX AWG (XX.X mm<sup>2</sup>) COMPACT AL.— ALUMAFLEX® AA8176 2000V 90°C WET OR DRY (-40 ?C) SUN RES DIRECT BURIAL OR RHH-RHW-2 2000V — RoHS



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## Table 1 – Weights and Measurements

Stock Number	Cond. Size	Diameter Over Conductor	Insul. Thickness	Approx. OD	Aluminum Weight	Approx. Weight
	AWG/Kcmil	inch	mil	inch	lb/1000ft	lb/1000ft
643579◇	6	0.169	85	0.339	25	55
643582◇	4	0.213	85	0.383	39	75
643586◇	1	0.299	105	0.509	79	138
643589◇	1/0	0.336	105	0.546	100	164
643592◇	2/0	0.376	105	0.586	125	196
643596◇	3/0	0.423	105	0.633	158	235
643599◇	4/0	0.475	105	0.685	199	284
641823◇	250	0.52	120	0.76	236	342
641820◇	300	0.57	120	0.81	283	398
641817◇	350	0.616	120	0.856	330	452
641814◇	400	0.659	120	0.899	377	507
641493◇	500	0.736	120	0.976	471	614
641496◇	600	0.813	135	1.083	572	751
641500◇	750	0.908	135	1.178	707	902
641932◇	1000	1.06	135	1.33	942	1166

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F).

## Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	Allowable Ampacity At 60° C†	Allowable Ampacity At 75° C†	Allowable Ampacity At 90° C†
	AWG/Kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
643579◇	6	1.4	157	0.661	0.848	0.038	40	50	55
643582◇	4	1.5	250	0.416	0.533	0.035	55	65	75
643586◇	1	2	398	0.207	0.265	0.034	85	100	115
643589◇	1/0	2.2	634	0.164	0.211	0.033	100	120	135
643592◇	2/0	2.3	799	0.13	0.167	0.032	115	135	150
643596◇	3/0	2.5	1007	0.103	0.132	0.031	130	155	175
643599◇	4/0	2.7	1270	0.082	0.105	0.03	150	180	205
641823◇	250	3	1500	0.0694	0.089	0.03	170	205	230
641820◇	300	3.2	1800	0.0578	0.075	0.03	195	230	260
641817◇	350	3.4	2100	0.0495	0.064	0.029	210	250	280
641814◇	400	3.6	2400	0.0434	0.056	0.029	225	270	305
641493◇	500	3.9	3000	0.0347	0.045	0.028	260	310	350
641496◇	600	5.4	3600	0.0289	0.038	0.028	285	340	385
641500◇	750	5.9	4500	0.0231	0.031	0.028	320	385	435
641932◇	1000	6.7	6000	0.0173	0.024	0.027	375	445	500

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F).

MBR is based on an operating voltage of less than or equal to 1000 volts. MBR for operating voltages above 1000 Volt is 8 X OD per NEC 300.34.



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