

# 1/C AL 2000V XLPE RHH/RHW-2 Power Cable RED 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

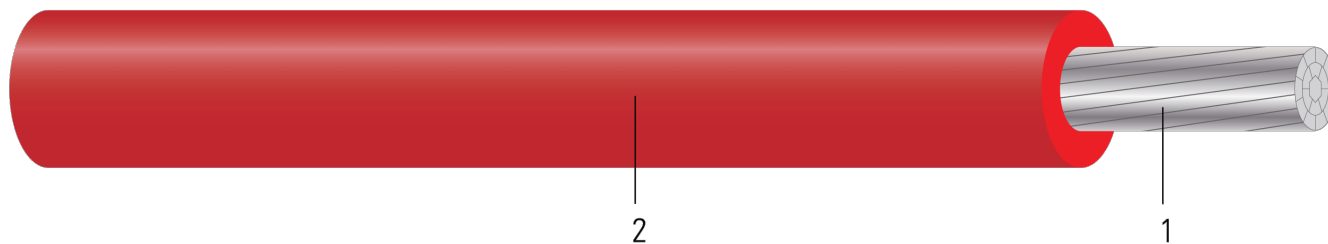


Image not to scale. See Table 1 for dimensions.

## 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



**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
643578◇	6	0.169	85	0.339	25	55
643581◇	4	0.213	85	0.383	39	75
643584◇	1	0.299	105	0.509	79	138
643588◇	1/0	0.336	105	0.546	100	164
643591◇	2/0	0.376	105	0.586	125	196
643595◇	3/0	0.423	105	0.633	158	235
643598◇	4/0	0.475	105	0.685	199	284
641822◇	250	0.52	120	0.76	236	342
641819◇	300	0.57	120	0.81	283	398
641816◇	350	0.616	120	0.856	330	452
641813◇	400	0.659	120	0.899	377	507
641494◇	500	0.736	120	0.976	471	614
641497◇	600	0.813	135	1.083	572	751
641501◇	750	0.908	135	1.178	707	902
641931◇	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

**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	Shield Short Circuit Current 6 Cycles	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	Amp
643578◇	6	2.71	157	0.661	0.848	0.038	6016	40	50	55
643581◇	4	3.06	250	0.416	0.533	0.035	9569	55	65	75
643584◇	1	4.07	398	0.207	0.265	0.034	19186	85	100	115
643588◇	1/0	4.37	634	0.164	0.211	0.033	24209	100	120	135
643591◇	2/0	4.69	799	0.13	0.167	0.032	30513	115	135	150
643595◇	3/0	5.06	1007	0.103	0.132	0.031	38468	130	155	175
643598◇	4/0	5.48	1270	0.082	0.105	0.03	48509	150	180	205
641822◇	250	6.08	1500	0.0694	0.089	0.03	57313	170	205	230
641819◇	300	6.48	1800	0.0578	0.075	0.03	68775	195	230	260
641816◇	350	6.85	2100	0.0495	0.064	0.029	80238	210	250	280
641813◇	400	7.19	2400	0.0434	0.056	0.029	91700	225	270	305
641494◇	500	7.81	3000	0.0347	0.045	0.028	114625	260	310	350
641497◇	600	8.66	3600	0.0289	0.038	0.028	137550	285	340	385
641501◇	750	9.42	4500	0.0231	0.031	0.028	171938	320	385	435
641931◇	1000	10.64	6000	0.0173	0.024	0.027	229250	375	445	500

† Ampacities are based on Table 310.15 (B)(16) of the NEC, 2017 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

