

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

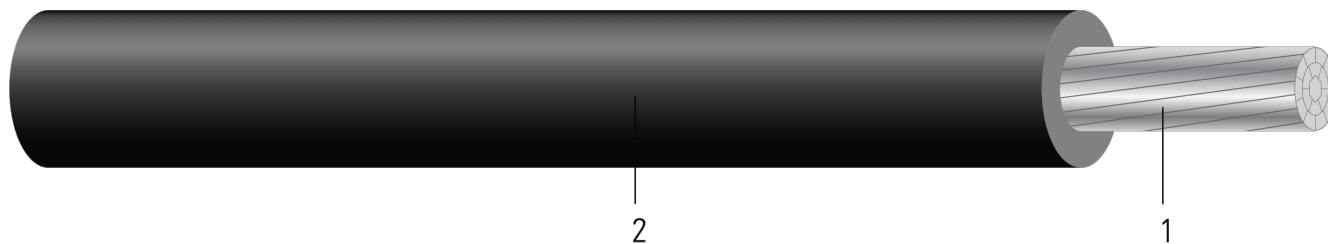


Image not to scale. See Table 1 for dimensions.

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 mm²) 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	Cond. Number	Cond. Strands	Diameter Over Conductor	Insul. Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	No.	No.	inch	mil	inch	lb/1000ft
643576◇	6	1	7	0.169	85	0.339	55
643580◇	4	1	7	0.213	85	0.383	75
643583◇	1	1	8	0.299	105	0.509	138
643587◇	1/0	1	10	0.336	105	0.546	164
643590◇	2/0	1	12	0.376	105	0.586	196
643594◇	3/0	1	16	0.423	105	0.633	235
643597◇	4/0	1	19	0.475	105	0.685	284
641821◇	250	1	22	0.52	120	0.76	342
641818◇	300	1	35	0.57	120	0.81	398
641815◇	350	1	35	0.616	120	0.856	452
641812◇	400	1	35	0.659	120	0.899	507
641492◇	500	1	35	0.736	120	0.976	614
641495◇	600	1	58	0.813	135	1.083	751
641499◇	750	1	58	0.908	135	1.178	902
641930◇	1000	1	58	1.06	135	1.33	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	Cond. Number	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance	Min Bending Radius	Allowable Ampacity In Air 75°C†	Allowable Ampacity In Air 90°C†	Allowable Ampacity At 90°C†
	AWG/Kcmil	No.	Ω/1000ft	Ω/1000ft	MΩ/1000ft	inch	Amp	Amp	Amp
643576◇	6	1	0.661	0.848	0.038	2.71	75	85	55
643580◇	4	1	0.416	0.533	0.035	3.06	100	115	75
643583◇	1	1	0.207	0.265	0.034	4.07	155	175	115
643587◇	1/0	1	0.164	0.211	0.033	4.37	180	205	135
643590◇	2/0	1	0.13	0.167	0.032	4.69	210	235	150
643594◇	3/0	1	0.103	0.132	0.031	5.06	240	270	175
643597◇	4/0	1	0.082	0.105	0.03	5.48	280	315	205
641821◇	250	1	0.0694	0.089	0.03	6.08	315	355	230
641818◇	300	1	0.0578	0.075	0.03	6.48	350	395	260
641815◇	350	1	0.0495	0.064	0.029	6.85	395	445	280
641812◇	400	1	0.0434	0.056	0.029	7.19	425	480	305
641492◇	500	1	0.0347	0.045	0.028	7.81	485	445	350
641495◇	600	1	0.0289	0.038	0.028	8.66	545	615	385
641499◇	750	1	0.0231	0.031	0.028	9.42	620	700	435
641930◇	1000	1	0.0173	0.024	0.027	10.64	750	845	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)

