

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

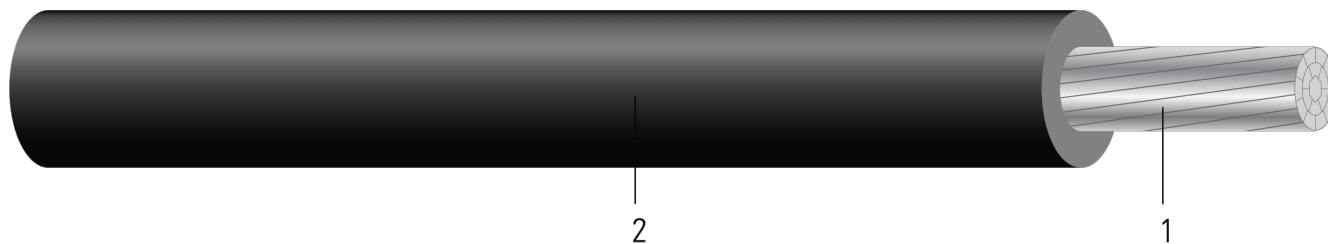


Image not to scale. See Table 1 for dimensions.

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



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Table 1 – Weights and Measurements

Stock Number	Cond. Size AWG/Kcmil	Cond. Number No.	Cond. Strands No.	Diameter Over Conductor inch	Insul. Thickness mil	Approx. OD inch	Approx. Weight 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

† 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 AWG/Kcmil	Cond. Number No.	DC Resistance @ 25°C Ω/1000ft	AC Resistance @ 90°C Ω/1000ft	Inductive Reactance MΩ/1000ft	Min Bending Radius inch	Allowable Ampacity In Air 75°C† Amp	Allowable Ampacity In Air 90°C† Amp	Allowable Ampacity At 90° C† Amp
643576◇	6	1	0.661	0.848	0.038	1.4	75	85	55
643580◇	4	1	0.416	0.533	0.035	1.5	100	115	75
643583◇	1	1	0.207	0.265	0.034	2	155	175	115
643587◇	1/0	1	0.164	0.211	0.033	2.2	180	205	135
643590◇	2/0	1	0.13	0.167	0.032	2.3	210	235	150
643594◇	3/0	1	0.103	0.132	0.031	2.5	240	270	175
643597◇	4/0	1	0.082	0.105	0.03	2.7	280	315	205
641821◇	250	1	0.0694	0.089	0.03	3	315	355	230
641818◇	300	1	0.0578	0.075	0.03	3.2	350	395	260
641815◇	350	1	0.0495	0.064	0.029	3.4	395	445	280
641812◇	400	1	0.0434	0.056	0.029	3.6	425	480	305
641492◇	500	1	0.0347	0.045	0.028	3.9	485	445	350
641495◇	600	1	0.0289	0.038	0.028	5.4	545	615	385
641499◇	750	1	0.0231	0.031	0.028	5.9	620	700	435
641930◇	1000	1	0.0173	0.024	0.027	6.7	750	845	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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