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

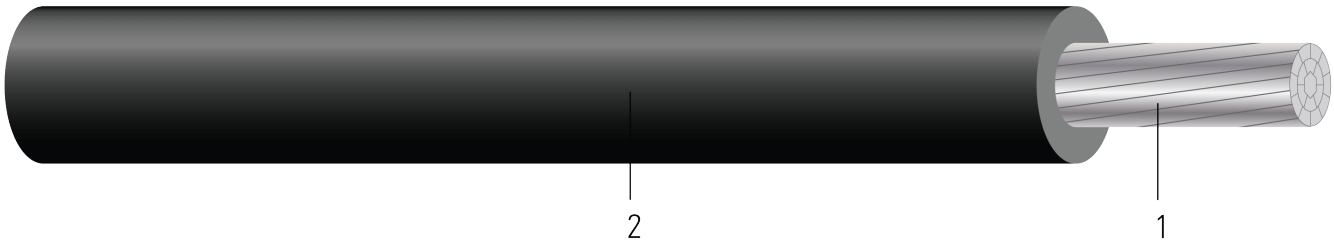


Image not to scale. See Table 1 for dimensions.

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	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Approx. OD	Aluminum Weight	Approx. Weight
	AWG/Kcmil		No. of Strands	inch	mil	inch	lb/1000ft	lb/1000ft
643576	6	1	7	0.169	85	0.339	24	54
643580	4	1	7	0.212	85	0.383	39	74
643583	1	1	8	0.298	105	0.509	78	137
643587	1/0	1	10	0.336	105	0.546	99	163
643590	2/0	1	12	0.376	105	0.586	125	195
643594	3/0	1	16	0.422	105	0.633	158	235
643597	4/0	1	19	0.474	105	0.685	199	284
641821	250	1	22	0.520	120	0.760	235	342
641818	300	1	21	0.569	120	0.810	282	397
641815	350	1	35	0.615	120	0.856	329	452
641812	400	1	35	0.659	120	0.899	376	506
582267	500	1	34	0.735	120	0.978	471	614
641495	600	1	37	0.812	135	1.083	565	743
641499	750	1	61	0.908	135	1.178	706	902
641930	1000	1	58	1.060	135	1.330	942	1166

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
* Strand count meets minimum number per ASTM

Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Cond. Number	Min Bending Radius	Max Pull Tension	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	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
643576	6	1	1.3	157	0.674	0.812	0.051	40	50	55
643580	4	1	1.5	250	0.424	0.510	0.048	55	65	75
643583	1	1	2.0	502	0.211	0.254	0.046	85	100	115
643587	1/0	1	2.1	633	0.168	0.201	0.044	100	120	135
643590	2/0	1	2.3	798	0.133	0.160	0.043	115	135	150
643594	3/0	1	2.5	1006	0.105	0.126	0.042	130	155	175
643597	4/0	1	2.7	1269	0.084	0.100	0.041	150	180	205
641821	250	1	3.0	1500	0.071	0.086	0.041	170	205	230
641818	300	1	3.2	1800	0.059	0.071	0.041	195	230	260
641815	350	1	3.4	2100	0.050	0.062	0.040	210	250	280
641812	400	1	3.5	2400	0.044	0.054	0.040	225	270	305
582267	500	1	3.9	3000	0.035	0.044	0.039	260	310	350
641495	600	1	5.4	3600	0.029	0.037	0.039	285	340	385
641499	750	1	5.8	4500	0.024	0.031	0.038	320	385	435
641930	1000	1	6.6	6000	0.018	0.025	0.037	375	445	500

† Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.

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† Ampacities have been adjusted for more than Three Current-Carrying Conductors.
* Inductive impedance is based on non-ferrous conduit with one diameter spacing.