



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

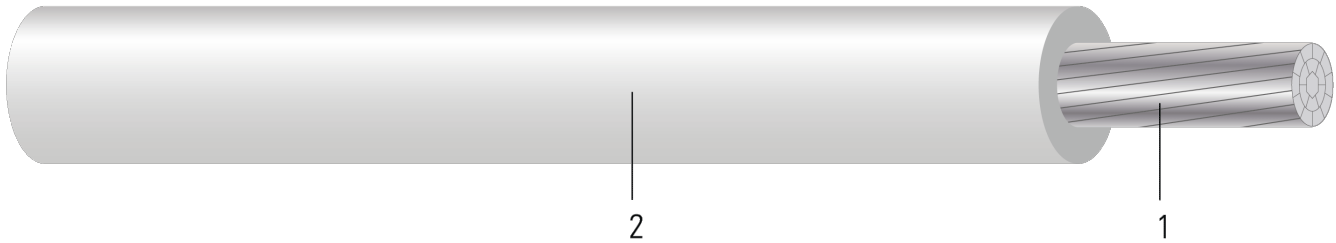


Image not to scale. See Table 1 for dimensions.

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 SSR™ 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	Strand Count	Diameter Over Conductor	Insul. Thickness	Insulation Color	Approx. OD	Aluminum Weight	Approx. Weight
	AWG/Kcmil	No. of Strands	inch	mil		inch	lb/1000ft	lb/1000ft
643579	6	7	0.169	85	white	0.339	24	54
643582	4	7	0.212	85	white	0.383	39	74
643586	1	8	0.298	105	white	0.509	78	138
643589	1/0	10	0.336	105	white	0.546	99	164
643592	2/0	12	0.376	105	white	0.586	125	196
643596	3/0	16	0.422	105	white	0.633	158	235
643599	4/0	19	0.474	105	white	0.685	199	284
641823	250	22	0.520	120	white	0.760	235	342
641820	300	21	0.569	120	white	0.810	282	398
641817	350	35	0.615	120	white	0.856	329	453
641814	400	35	0.659	120	white	0.899	376	507
641493	500	34	0.735	120	white	0.978	471	615
641496	600	41	0.812	135	white	1.075	565	742
641500	750	61	0.908	135	white	1.178	706	903
641932	1000	58	1.060	135	white	1.330	942	1167

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

TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
	AWG/Kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
643579	6	1.3	157	0.674	0.812	0.051	50	55
643582	4	1.5	250	0.424	0.510	0.048	65	75
643586	1	2.0	502	0.211	0.254	0.046	100	115
643589	1/0	2.1	633	0.168	0.201	0.044	120	135
643592	2/0	2.3	798	0.133	0.160	0.043	135	150
643596	3/0	2.5	1006	0.105	0.126	0.042	155	175
643599	4/0	2.7	1269	0.084	0.100	0.041	180	205
641823	250	3.0	1500	0.071	0.086	0.041	205	230
641820	300	3.2	1800	0.059	0.071	0.041	230	260
641817	350	3.4	2100	0.050	0.062	0.040	250	280
641814	400	3.5	2400	0.044	0.054	0.040	270	305
641493	500	3.9	3000	0.035	0.044	0.039	310	350
641496	600	5.3	3600	0.029	0.037	0.039	340	385
641500	750	5.8	4500	0.024	0.031	0.038	385	435
641932	1000	6.6	6000	0.018	0.025	0.037	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.





† Ampacities have been adjusted for more than Three Current-Carrying Conductors.

* Inductive impedance is based on non-ferrous conduit with one diameter spacing center-to-center.

