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

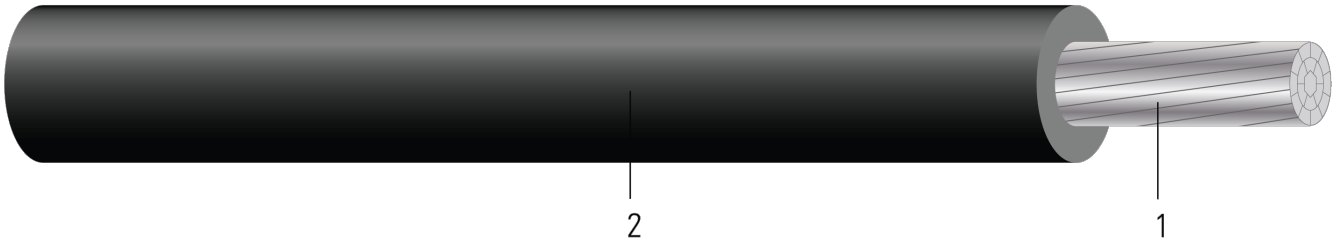


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** AlumaFlex® Single Input Wire (SIW) 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
- Made in America: Compliant with both Buy American and Buy America Act (BAA) requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy America requirements per 49 C.F.R. part 661
- 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

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
3/0	1	16	0.422	105	0.633	158	235

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item

Copyright © 2026 Southwire Company, LLC. All Rights Reserved
UPDATED: April 3, 2025, 11:12 p.m.UTC REVISION: 1.000.004

* 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

Cond. Size	Cond. Number	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
3/0	1	5.1	1006	0.105	0.126	0.042	155	175

† 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.

Stock Code Colors

Size	Black	Red	White
AWG/Kcmil			
6 (7)	643576	643578	643579
4 (7)	643580	643581	643582
1 (8)	643583	643584	643586
1/0 (10)	643587	643588	643589
2/0 (12)	643590	643591	643592
3/0 (16)	643594	643595	643596
4/0 (19)	643597	643598	643599
250 (22)	641821	641822	641823
300 (21)	641818	641819	641820
350 (35)	641815	641816	641817
400 (35)	641812	641813	641814
500 (34)	641492	641494	641493
600 (37)	641495	641497	641496
750 (37)	641499	641501	641500
1000 (58)	641930	641931	641932

Copyright © 2026 Southwire Company, LLC. All Rights Reserved