# 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

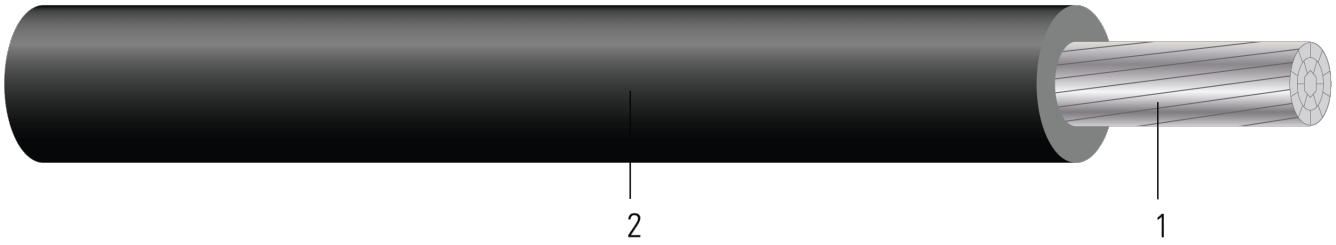



Image not to scale. See Table 1 for dimensions.

## 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 |
| 500 | 1 | 34 | 0.735 | 120 | 0.978 | 471 | 614 |

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


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* 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 |
| 500 | 1 | 7.8 | 3000 | 0.035 | 0.044 | 0.039 | 310 | 350 |

† 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 |


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