

2000 Volt High Flex Copper Type PV

Single Conductor Photovoltaic (Type PV) Power Cable 2000 Volt Copper Conductor XLPE Insulation. Heat, Moisture, Sunlight Resistant RoHS. 90°C



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Flexible stranded bare copper per ASTM B3 and ASTM B173 or flexible tinned copper per ASTM B33.
- Insulation:** Cross Linked Polyethylene (XLPE).

APPLICATIONS AND FEATURES:

Southwire's 2000 Volt power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, aerial supported by a messenger, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B173 Rope-Lay-Stranded Copper Conductors Having Concentric-Stranded Members
- UL 44 Thermoset-Insulated Wires and Cables
- 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

SAMPLE PRINT LEGEND:

SOUTHWIRE E316464 {UL} PV WIRE XX AWG (XXX.XX{mm²}) CU 2000V 90°C WET OR DRY -40°C SUN RES DIRECT BURIAL VW-1 OR RHW-2 2000V --- RoHS {MMM/DD/YYYY}

Table 1 – Weights and Measurements

| Stock Number | Cond. Size AWG/Kcmil | Strand Count No. of Strands | Diameter Over Conductor inch | Insul. Thickness mil | Approx. OD inch | Copper Weight lb/1000ft | Approx. Weight lb/1000ft |
|--------------|-------------------------|--------------------------------|---------------------------------|-------------------------|--------------------|----------------------------|-----------------------------|
| 664694 | 8 | 49 | 0.166 | 85 | 0.326 | 52 | 91 |
| 668048* | 8 | 54 | 0.145 | 85 | 0.326 | 52 | 90 |
| 668079 | 6 | 133 | 0.210 | 85 | 0.360 | 82 | 117 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

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.





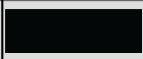


Table 2 – Electrical and Engineering Data

| 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 |
| 664694 | 8 | 1.3 | 132 | 0.701 | 0.844 | 0.052 | 50 | 55 |
| 668048* | 8 | 1.3 | 132 | 0.679 | 0.818 | 0.052 | 50 | 55 |
| 668079 | 6 | 1.4 | 209 | 0.446 | 0.536 | 0.051 | 65 | 75 |

* Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.

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

Stock Code Colors

| Size | Black | Red | White |
|---------|---|---|---|
| |  |  |  |
| 8 (49) | 664694 | 664709 | 668032 |
| 8 (54) | 668048 | 668051 | |
| 6 (133) | 668079 | | |

