



AL 600V XLPE Insulation XHHW-2. CT Rated - Sunlight Resistant - Silicone Free

Power Cable 600 or 1000 Volt Single Conductor Aluminum, Cross Linked Polyethylene (XLPE) insulation XHHW-2. CT Rated 1/0 and Larger - Sunlight Resistant - Silicone Free



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
- Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2

APPLICATIONS AND FEATURES:

Southwire's 600 or 1000 Volt power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, 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. For uses in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502. CT Rated 1/0 and Larger - Sunlight Resistant - Silicone Free

SPECIFICATIONS:

- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- ASTM B836 Compact Rounded Stranded Aluminum Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test (1/0 and Larger)
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- CT USE Sizes 1/0 AWG and Larger
- VW-1 (Vertical-Wire) Flame Test

SAMPLE PRINT LEGEND:

SOUTHWIRE E30117 {UL} XXX AWG 8000 COMPACT AL.--- TRIPLE E ALLOY AA8176 TYPE XHHW-2 VW-1 FOR CT USE SUN. RES. 600V OR 1000V {YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

Table 1 – Weights and Measurements

| Cond. Size AWG/Kcmil | Cond. Number | Strand Count No. of Strands | Diameter Over Conductor inch | Insul. Thickness mil | Approx. OD inch | Aluminum Weight lb/1000ft | Approx. Weight lb/1000ft |
|-------------------------|--------------|--------------------------------|---------------------------------|-------------------------|--------------------|------------------------------|-----------------------------|
| 600 | 1 | 58 | 0.812 | 80 | 0.973 | 565 | 707 |

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

| 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 |
| 600 | 1 | 3.8 | 3600 | 0.029 | 0.037 | 0.039 | 340 | 385 |

* 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.

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

