



# 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

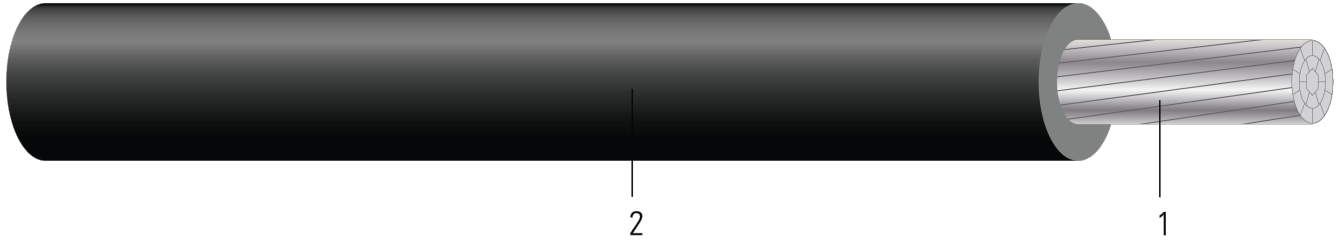


Image not to scale. See Table 1 for dimensions.

## 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





**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.

