

1/C CU 600V XLPE XHHW-2 PVC Power Cable

Power Cable 600Volt Single Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Polyvinyl Chloride (PVC) Jacket



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
3. **Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 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. Rated for 1000 lbs./FT maximum sidewall pressure.

SPECIFICATIONS:

- ASTM B3 Standard Specification for Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test (1/0 and Larger)
- ICEA S-58-679 Control Cable Conductor Identification Method 4
- 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

SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE MASTER-DESIGN {UL} XXX KCMIL CU TYPE XHHW-2/PVC JKT XX MILS XLP XX MILS PVC SUNLIGHT RESISTANT FOR CT USE 600V

Table 1 – Weights and Measurements

| Stock Number | Cond. Size | Diameter Over Conductor | Insul. Thickness | Diameter Over Insulation | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight |
|--------------|---------------|-------------------------|------------------|--------------------------|------------------|------------|---------------|----------------|
| | AWG/ Kcmil | inch | mil | inch | mil | inch | lb/1000ft | lb/1000ft |
| 890181 | 2/0 | 0.404 | 55 | 0.514 | 45 | 0.604 | 411 | 506 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item



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Services

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F).

Table 2 – Electrical and Engineering Data

| Stock Number | Cond. Size | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 90°C | Inductive Reactance @ 60Hz | Allowable Ampacity At 60° C† | Allowable Ampacity At 75° C† | Allowable Ampacity At 90° C† |
|--------------|------------|--------------------|------------------|----------------------|----------------------|----------------------------|------------------------------|------------------------------|------------------------------|
| | AWG/Kcmil | inch | lb | Ω/1000ft | Ω/1000ft | Ω/1000ft | Amp | Amp | Amp |
| 890181 | 2/0 | 2.4 | 1065 | 0.081 | 0.102 | 0.031 | 145 | 175 | 195 |

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F).

