

# 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:

- Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
- 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/<br>Kcmil | inch                    | mil              | inch                     | mil              | inch       | lb/1000ft     | lb/1000ft      |
| TBA          | 1/0           | 0.360                   | 55               | 0.470                    | 45               | 0.560      | 326           | 412            |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item



† 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                          |
| TBA          | 1/0        | 2.2                | 845              | 0.102                | 0.128                | 0.032                      | 125                          | 150                          | 170                          |

† 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).

