



Multi-Conductor CU or TCU 600 V FR-XLPE AL Foil Shield TCU Drain Wire Thermoset CPE-TS Jacket Control or Power Cable Color Method 1 Table 1

600 Volt Copper or Tinned Copper, Fire Retardant Cross-Linked Polyethylene (FR-XLPE) Insulation Aluminum Foil Shield, Tinned Copper Drain Wire, Thermoset Chlorinated Polyethylene (CPE-TS) Jacket. Sunlight Resistant - For Direct Burial. Conductor Identification Method 1 Table 1

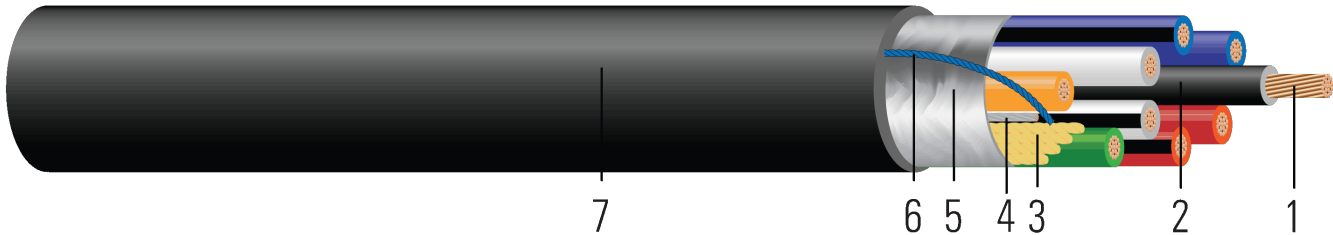


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare or tinned copper per ASTM B3 or B33 and ASTM B8
2. **Insulation:** Fire Retardant Cross-Linked Polyethylene (FR-XLPE) Type XHHW-2 for size 14 AWG and larger when UL listed
3. **Filler:** Polypropylene or paper filler
4. **Drain Wire:** 22 AWG tinned copper drain wire per ASTM B33
5. **Shield:** 100% coverage aluminum/polyester foil shield
6. **Rip Cord:** Rip cord for ease of jacket removal
7. **Overall Jacket:** Black Thermoset Chlorinated Polyethylene (CPE-TS)

APPLICATIONS AND FEATURES:

Southwire's 600 Volt control 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. UL rated construction can be used in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502. UL rated constructions with 3 or more conductors are listed for exposed runs (TC-ER) per NEC 336.10.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1277 Electrical Power and Control Tray Cables
- ICEA S-58-679 Control Cable Conductor Identification Method 1 Table 1
- ICEA S-73-532 Standard for Control, Thermocouple Extension and Instrumentation Cables
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy





SAMPLE PRINT LEGEND:

UL Listed

{SQFTG} SOUTHWIRE® E75755 {UL} TYPE TC or TC-ER XX AWG CU XX/C XHHW-2 CDRS E1 22 AWG TIN CU DW
SHIELDED 90°C WET OR DRY CPE-TS JKT 600V SUN RES OIL RES II DIRECT BURIAL

Non UL Listed

{SQFTG} SOUTHWIRE® XX AWG CU X/C FR-XLPE CDRS E1 SHIELDED 90°C WET OR DRY CPE-TS JKT 600V SUN RES





Table 1 – Physical and Electrical Data

| Stock Number | Cond. Size | Cond. Number | Cond. Strands | Diameter Over Cond. | Insulation Color | Insul. Thickness | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance | Min Bending Radius | Allowable Ampacity 75°C | Allowable Ampacity 90°C |
|--------------|------------|--------------|---------------|---------------------|------------------|------------------|------------------|------------|---------------|----------------|----------------------|----------------------|---------------------|--------------------|-------------------------|-------------------------|
| | AWG | No. | strands | inch | | mil | mil | inch | lb / 1000ft | lb / 1000ft | Ω /1000ft | Ω /1000ft | Ω/1000ft | inch | Amp | Amp |
| 12 AWG | | | | | | | | | | | | | | | | |
| 628738 | 12 | 4 | 7 | 0.088 | BK, WE, RD, BE | 30 | 45 | 0.478 | 83 | 160 | 1.662 | 2.002 | 0.054 | 1.9 | 20 | 24 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

^ UL listed part number. 16 AWG can only be Type TC rated. 2/C constructions are Type TC rated.

* 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.

* Ampacities have been adjusted for more than Three Current-Carrying Conductors.

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.

