

Multi-Conductor CU 600 V FR-XLPE Thermoset LSZH Jacket Control Cable Color Method 1 Table 2

Control Cable 600 Volt Copper Conductors, Flame Retardant Cross Linked Polyethylene (FR-XLPE) Insulation Thermoset SOLONON® Low Smoke Zero Halogen (LSZH-TS) Jacket, Control Cable Conductor Identification Method 1 Table 2. Silicone Free



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** 7 strands class B compressed bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Flame Retardant Cross Linked Polyethylene (FR-XLPE)
3. **Filler:** Polypropylene filler on cables with 5 or less conductors
4. **Binder:** Polyester flat thread binder tape applied for cables with more than 5 conductors
5. **Rip Cord:** Rip cord for ease of jacket removal
6. **Overall Jacket:** Thermoset SOLONON® Low Smoke Zero Halogen (LSZH-TS) Jacket

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 constructions 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 Standard Specification for Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1277 Electrical Power and Control Tray Cables
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-58-679 Control Cable Conductor Identification Method 1 Table 2
- 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
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- VW-1 (Vertical-Wire) Flame Test



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SAMPLE PRINT LEGEND:

UL Listed

SOUTHWIRE E75755 {UL} XX AWG X/C FR-XLPE CDRS 90C LSZH JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600V
{MM/DD/YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

Non UL Listed

SOUTHWIRE XX AWG X/C FR-XLPE CDRS 90C LSZH JACKET SUN RES FT-4 DIR BUR 600V YEAR {SEQUENTIAL FOOTAGE
MARKS} SEQ FEET



Table 1 – Physical and Electrical Data

| Stock Number | Cond. Size | Cond. Number | Cond. Strands | Diameter Over Cond. | Insul. Thickness | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight | DC Resistance @ 25°C | AC Resistance @ 90°C | Min Bending Radius | Allowable Ampacity At 60°C * | Allowable Ampacity 75°C * | Allowable Ampacity 90°C * |
|--------------|------------|--------------|---------------|---------------------|------------------|------------------|------------|---------------|----------------|----------------------|----------------------|--------------------|------------------------------|---------------------------|---------------------------|
| | AWG | No. | strands | inch | mil | mil | inch | lb /1000ft | lb /1000ft | Ω /1000ft | Ω /1000ft | inch | Amp | Amp | Amp |
| 14 AWG | | | | | | | | | | | | | | | |
| 621206 | 14 | 12 | 7 | 0.07 | 30 | 60 | 0.668 | 153 | 283 | 2.631 | 3.17 | 8 | 7 | 10 | 12 |
| 12 AWG | | | | | | | | | | | | | | | |
| 621197 | 12 | 4 | 7 | 0.088 | 30 | 45 | 0.458 | 81 | 143 | 1.662 | 2.002 | 5.4 | 16 | 20 | 24 |
| 619994 | 12 | 12 | 7 | 0.088 | 30 | 80 | 0.736 | 244 | 408 | 1.662 | 2.002 | 8.8 | 10 | 12 | 15 |
| 10 AWG | | | | | | | | | | | | | | | |
| 604432 | 10 | 4 | 7 | 0.113 | 30 | 60 | 0.51 | 129 | 208 | 1.04 | 1.253 | 6.1 | 24 | 28 | 32 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

^ UL Listed part number

