

# Multi-Conductor CU 1000 V FR-XLPE Shielded Thermoset LSZH Jacket Control Cable Color Method 1 Table 1

Control Cable 1000 Volt Copper Conductors, Flame Retardant Cross Linked Polyethylene (FR-XLPE) Insulation Shielded Thermoset SOLONON® Low Smoke Zero Halogen (LSZH-TS) Jacket, Control Cable Conductor Identification Method 1 Table 1. 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
4. **Binder:** Polypropylene tape
5. **Shielding:** 5 mils copper tape shield
6. **Rip Cord:** Rip cord for ease of jacket removal
7. **Overall Jacket:** Thermoset SOLONON® Low Smoke Zero Halogen (LSZH-TS) Jacket

## APPLICATIONS AND FEATURES:

Southwire's 1000 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.

## SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- 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:

SOUTHWIRE XX AWG X/C FR-XLPE CDRS SHIELDED 90C LSZH JACKET SUNLIGHT RESISTANT DIRECT BURIAL 1000V  
{MMM/DD/YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET



**Table 1 – Physical and Electrical Data**

| 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 @ 75°C | Inductive Reactance | 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            | Ω/1000ft            | inch               | Amp                        | Amp                     | Amp                     |
| 8 AWG      |              |               |                     |                  |                  |            |               |                |                      |                      |                     |                    |                            |                         |                         |
| 8          | 3            | 7             | 0.142               | 45               | 60               | 0.646      | 197           | 324            | 0.64                 | 0.824                | 0.032               | 7.8                | 40                         | 50                      | 55                      |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

? Drain wire

\* 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 stock numbers containing more than Three Current-Carrying Conductors.

