

Multi-Conductor CU 600 V LCT Shielded PE/PVC Insulation PVC Jacket Control Cable Color Method 1 Table 1

Control Cable 600 Volt Copper Conductors, Polyethylene Polyvinyl Chloride (PE/PVC) Insulation Shielded Polyvinyl Chloride (PVC) 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:** Polyethylene (PE) and Polyvinyl Chloride (PVC)
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. **Shield:** 5 mils copper Longitudinally-Applied Corrugated Tape (LCT) shield
6. **Rip Cord:** Rip cord for ease of jacket removal
7. **Overall Jacket:** Polyvinyl Chloride (PVC) 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 75°C for normal operation in wet and dry locations, 90°C for emergency overload, and 150°C for short circuit conditions.

SPECIFICATIONS:

- ASTM B3 Standard Specification for 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 PE/PVC CDRS SHIELDED 90C PVC JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600V {MM/YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET



Table 1 – Physical and Electrical Data

| Stock Number | Cond. Size | Cond. Number | 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 * |
|--------------|------------|--------------|---------------------|------------------|------------------|------------|---------------|----------------|----------------------|----------------------|--------------------|------------------------------|---------------------------|
| | AWG | No. | inch | mil | mil | inch | lb /1000ft | lb /1000ft | Ω /1000ft | Ω /1000ft | inch | Amp | Amp |
| 10 AWG | | | | | | | | | | | | | |
| 662499 | 10 | 2 | 0.111 | 30 | 60 | 0.573 | 94 | 198 | 1.040 | 1.300 | 6.9 | 30 | 35 |
| 662497 | 10 | 3 | 0.111 | 30 | 60 | 0.595 | 129 | 247 | 1.040 | 1.300 | 5.5 | 30 | 35 |
| 616984 | 10 | 4 | 0.111 | 30 | 60 | 0.637 | 165 | 299 | 1.040 | 1.300 | 7.6 | 24 | 28 |
| 662495 | 10 | 5 | 0.111 | 30 | 60 | 0.686 | 201 | 341 | 1.040 | 1.300 | 8.2 | 24 | 28 |
| TBA | 10 | 6 | 0.111 | 30 | 60 | 0.739 | 239 | 361 | 1.040 | 1.300 | 8.9 | 24 | 28 |
| TBA | 10 | 7 | 0.111 | 30 | 60 | 0.739 | 271 | 400 | 1.040 | 1.300 | 8.9 | 21 | 24 |
| 662472 | 10 | 8 | 0.111 | 30 | 60 | 0.796 | 307 | 494 | 1.040 | 1.300 | 9.6 | 21 | 24 |
| 619191 | 10 | 9 | 0.111 | 30 | 80 | 0.885 | 291 | 583 | 1.040 | 1.300 | 10.6 | 21 | 24 |
| TBA | 10 | 10 | 0.111 | 30 | 80 | 0.952 | 383 | 590 | 1.040 | 1.300 | 11.4 | 15 | 17 |
| 662492 | 10 | 12 | 0.111 | 30 | 80 | 0.975 | 451 | 712 | 1.040 | 1.300 | 12 | 15 | 17 |
| TBA | 10 | 15 | 0.111 | 30 | 80 | 1.074 | 555 | 817 | 1.040 | 1.300 | 12.8 | 15 | 17 |
| TBA | 10 | 19 | 0.111 | 30 | 80 | 1.125 | 689 | 987 | 1.040 | 1.300 | 13.5 | 15 | 17 |
| TBA | 10 | 20 | 0.111 | 30 | 80 | 1.178 | 725 | 1038 | 1.040 | 1.300 | 14.1 | 15 | 17 |
| TBA | 10 | 25 | 0.111 | 30 | 80 | 1.298 | 898 | 1265 | 1.040 | 1.300 | 15.6 | 13 | 15 |
| TBA | 10 | 30 | 0.111 | 30 | 80 | 1.368 | 1066 | 1479 | 1.040 | 1.300 | 16.4 | 13 | 15 |
| TBA | 10 | 37 | 0.111 | 30 | 80 | 1.471 | 1300 | 1779 | 1.040 | 1.300 | 17.6 | 12 | 14 |
| 623246 | 4 | 2 | 0.231 | 45/25 | 80 | 1.007 | 326 | 614 | 2.630 | 3.288 | 12.1 | 70 | 85 |

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 310.15 (B)(16) of the NEC, 2017 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

