

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 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/ YYY} {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 @ 75°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
10 AWG															
662499	10	2	7	0.113	30	60	0.582	100	210	1.040	1.253	7.0	30	35	40
662497	10	3	7	0.113	30	60	0.595	135	246	1.040	1.253	7.1	30	35	40
616984	10	4	7	0.113	30	60	0.642	178	302	1.040	1.253	7.7	24	28	32
662495	10	5	7	0.113	30	60	0.687	206	344	1.040	1.253	8.2	24	28	32
662472	10	8	7	0.113	30	60	0.802	319	499	1.040	1.253	9.6	21	24	28
619191	10	9	7	0.113	30	80	0.885	346	582	1.040	1.253	10.6	21	24	28
662492	10	12	7	0.113	30	80	0.983	450	720	1.040	1.253	11.8	15	17	20
623246	4	2	7	0.225	45	80	1.015	326	622	0.258	0.310	12.2	70	85	95

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

† 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.

* Inductive impedance is based on non-ferrous conduit with one diameter spacing.

