

Multi-Conductor CU 600 V PE/PVC Insulation PVC Jacket Control Cable Color Method 1 Table 2

Control Cable 600 Volt Copper Conductors, Polyethylene and Polyvinyl Chloride (PE/PVC) Insulation Polyvinyl Chloride (PVC) Jacket, Control Cable Conductor Identification Method 1 Table 2. Silicone Free



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** 7 strands class B compressed bare copper per ASTM B3 and ASTM B8
- Insulation:** 20 mils Polyethylene (PE) and 10 mils Polyvinyl Chloride (PVC) for cable sizes 16 AWG and larger
- Filler:** Polypropylene filler on cables with 5 or less conductors
- Binder:** Polyester flat thread binder tape applied for cables with more than 5 conductors
- Rip Cord:** Rip cord for ease of jacket removal
- 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
- CSA CSA marking is available upon request
- 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

SAMPLE PRINT LEGEND:

Non UL Listed

SOUTHWIRE XX AWG X/C PE-PVC CDRS PVC JKT 600V SUN. RES. YEAR SEQUENTIAL FOOTAGE MARKS



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	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
12 AWG																
624670	12	3	7	0.088	30	45	0.429	61	118	1.662	2.002	0.054	1.7	20	25	30
10 AWG																
617932	10	2	7	0.113	30	45	0.440	64	119	1.040	1.253	0.050	1.7	30	35	40
617933	10	4	7	0.113	30	45	0.510	129	202	1.040	1.253	0.050	2.0	24	28	32
621647	10	6	7	0.113	30	60	0.641	194	305	1.040	1.253	0.050	2.5	24	28	32
617931	10	12	7	0.113	30	80	0.883	388	605	1.040	1.253	0.050	3.5	15	17	20

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

[^] UL listed part number

* 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.

