Multi-Conductor CU 600 V 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. **Shielding:** 5 mils tape 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
- CSA CSA marking is available upon request
- 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 600V SHIELDED PVC JKT SUN. RES. DIRECT BURIAL {MM/DD/YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

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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 Rectance	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
18 AWG																
622108	18	3	7	0.045	25	45	0.326	32	66	6.669	8.035	0.036	3.9	-	-	14
606790	18	12	7	0.045	25	45	0.515	90	169	6.669	8.035	0.036	6.2	-	-	7
14 AWG																
606767	14	7	7	0.070	30	45	0.514	119	198	2.631	3.170	0.058	6.2	10	14	17
618969	14	12	7	0.070	30	60	0.690	194	331	2.631	3.170	0.058	8.3	7	10	12
12 AWG																
618721	12	2	7	0.088	30	45	0.421	64	114	1.662	2.002	0.054	5.1	20	25	30
618722	12	3	7	0.088	30	45	0.445	86	146	1.662	2.002	0.054	5.3	20	25	30
618723	12	4	7	0.088	30	45	0.484	109	182	1.662	2.002	0.054	5.8	16	20	24
618724	12	7	7	0.088	30	60	0.604	176	287	1.662	2.002	0.054	7.2	14	17	21
617106	12	12	7	0.088	30	80	0.810	290	468	1.662	2.002	0.054	9.7	10	12	15
10 AWG																
606768	10	2	7	0.113	30	45	0.464	91	155	1.040	1.253	0.050	3.2	30	35	40
619162	10	3	7	0.113	30	45	0.491	125	196	1.040	1.253	0.050	3.4	30	35	40
617105	10	4	7	0.113	30	60	0.558	160	246	1.040	1.253	0.050	3.9	24	28	32
620881	10	4	7	0.113	30	60	0.562	168	260	1.040	1.253	0.050	3.9	24	28	32
606769	10	5	7	0.113	30	60	0.615	196	302	1.040	1.253	0.050	4.3	24	28	32
618968	10	7	7	0.113	30	60	0.659	264	387	1.040	1.253	0.050	2.6	21	24	28
622296	10	7	7	0.113	30	60	0.663	266	391	1.040	1.253	0.050	4.6	21	24	28
606770	10	9	7	0.113	30	60	0.778	335	490	1.040	1.253	0.050	5.4	21	24	28
606771	10	12	7	0.113	30	80	0.911	438	663	1.040	1.253	0.050	10.9	15	17	20
8 AWG																
606773	8	2	7	0.141	45	60	0.674	142	272	0.653	0.786	0.052	4.7	40	50	55
620301	8	3	7	0.141	45	60	0.719	195	359	0.653	0.786	0.052	5.0	40	50	55
607397	8	5	7	0.141	45	80	0.903	308	543	0.653	0.786	0.052	6.3	32	40	44
6 AWG																
626204	6	3	7	0.177	45	60	0.732	286	421	0.411	0.495	0.051	5.1	55	65	75
606774	6	2	7	0.177	45	60	0.790	211	365	0.411	0.495	0.051	5.5	55	65	75
626304	6	4	7	0.177	45	80	0.963	381	655	0.411	0.495	0.051	6.7	44	52	60
600899	6	5	7	0.177	45	80	1.050	471	778	0.411	0.495	0.051	7.4	44	52	60
2 AWG																
626125	2	3	7	0.282	45	80	0.988	676	898	0.162	0.195	0.045	6.9	95	115	130

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 stock numbers containing more than Three Current-Carrying Conductors.