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

Power Cable 600 Volt Copper Conductors, Polyethylene and Polyvinyl Chloride (PE/PVC) Insulation 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. **Rip Cord:** Rip cord for ease of jacket removal
6. **Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt power 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-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 75C PVC JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600V {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	Allowab Ampacit 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																
606786	18	7	7	0.045	25	45	0.385	35	88	6.669	8.035	0.036	1.5	-	-	9
606787	18	12	7	0.045	25	45	0.495	60	137	6.669	8.035	0.036	1.9	-	-	7
16 AWG																
619128	16	4	7	0.056	25	45	0.380	32	81	4.181	5.037	0.033	1.5	-	-	14
669066	16	5	7	0.056	25	45	0.509	79	161	4.181	5.037	0.033	2.0	-	-	14
14 AWG																
620646	14	4	7	0.070	30	45	0.417	51	107	2.631	3.170	0.058	1.6	12	16	20
606776	14	7	7	0.070	30	45	0.494	89	166	2.631	3.170	0.058	1.9	10	14	17
606777	14	12	7	0.070	30	60	0.674	153	290	2.631	3.170	0.058	2.6	7	10	12
12 AWG																
616856	12	4	7	0.088	30	45	0.453	81	152	1.662	2.002	0.054	1.8	16	20	24
617416	12	5	7	0.088	30	60	0.543	101	190	1.662	2.002	0.054	2.1	16	20	24
619173	12	6	7	0.088	30	60	0.584	122	224	1.662	2.002	0.054	2.3	16	20	24
606896	12	7	7	0.088	30	60	0.584	142	253	1.662	2.002	0.054	2.3	14	17	21
617421	12	7	7	0.088	30	60	0.588	142	251	1.662	2.002	0.054	2.3	14	17	21
577810$	12	7	19	0.088	30	60	0.674	142	276	1.662	2.002	0.054	2.6	14	17	21
619382	12	9	7	0.088	30	60	0.675	183	312	1.662	2.002	0.054	2.7	14	17	21
619993$	12	12	19	0.088	30	60	0.754	244	400	1.662	2.002	0.054	3.0	10	12	15
617420	12	12	7	0.088	30	60	0.764	244	400	1.662	2.002	0.054	3.0	10	12	15
10 AWG																
618719	10	2	7	0.113	30	45	0.444	64	120	1.040	1.253	0.050	1.7	30	35	40
606778	10	2	7	0.113	30	45	0.448	64	125	1.040	1.253	0.050	1.7	30	35	40
619117	10	3	7	0.113	30	45	0.471	97	166	1.040	1.253	0.050	1.8	30	35	40
606779	10	3	7	0.113	30	45	0.471	97	166	1.040	1.253	0.050	1.8	30	35	40
618720	10	4	7	0.113	30	60	0.542	129	226	1.040	1.253	0.050	2.1	24	28	32
619301	10	4	7	0.113	30	60	0.546	129	227	1.040	1.253	0.050	2.1	24	28	32
616733	10	4	7	0.113	30	45	0.551	129	225	1.040	1.253	0.050	2.2	24	28	32
606781	10	5	7	0.113	30	60	0.591	161	272	1.040	1.253	0.050	2.3	24	28	32
619178	10	7	7	0.113	30	60	0.643	226	348	1.040	1.253	0.050	2.5	21	24	28
619179	10	8	7	0.113	30	60	0.700	258	390	1.040	1.253	0.050	2.8	21	24	28
606782	10	9	7	0.113	30	60	0.747	291	444	1.040	1.253	0.050	2.9	21	24	28
619181	10	10	7	0.113	30	60	0.814	323	487	1.040	1.253	0.050	3.2	15	17	20
606783	10	12	7	0.113	30	80	0.891	388	610	1.040	1.253	0.050	3.5	15	17	20
619119	10	12	7	0.113	30	80	0.906	388	633	1.040	1.253	0.050	3.6	15	17	20
618911$	10	12	19	0.117	30	80	0.887	388	598	1.040	1.253	0.050	3.5	15	17	20
617347$	9	2	19	0.131	45	45	0.472	77	136	0.825	0.994	0.052	1.8	50	60	63
617349$	9	4	19	0.131	45	60	0.581	154	250	0.825	0.994	0.052	2.3	40	48	50
617350$	9	8	19	0.131	45	60	0.753	309	451	0.825	0.994	0.052	3.0	35	42	44
8 AWG																

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	AWG	No.	strands	inch	mil	mil	inch	lb / 1000ft	lb / 1000ft	Ω /1000ft	Ω /1000ft	Ω/1000ft	inch	Amp	Amp	Amp
606784	8	2	7	0.141	45	60	0.654	102	244	0.653	0.786	0.052	2.6	40	50	55
619121	8	2	7	0.141	45	60	0.658	102	224	0.653	0.786	0.052	2.6	40	50	55
618426	8	3	7	0.141	45	60	0.695	154	315	0.653	0.786	0.052	2.7	40	50	55
620288	8	5	7	0.141	45	80	0.883	257	489	0.653	0.786	0.052	3.5	32	40	44
661502$	8	4	19	0.143	45	60	0.768	205	377	0.653	0.786	0.052	3.0	32	40	44
6 AWG																
606775	6	2	7	0.177	45	60	0.766	163	326	0.411	0.495	0.051	3.0	55	65	75
606763	6	3	7	0.177	45	60	0.808	245	444	0.411	0.495	0.051	3.2	55	65	75
4 AWG																
619125	4	2	7	0.225	45	80	0.919	260	487	0.258	0.310	0.048	3.6	70	85	95

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
$ 19 strand combination unilay conductor per ASTM B787
* 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.