Multi-Conductor CU 600 V FR-XLPE PVC Jacket Control Cable Color Method 1 Table 1

Control Cable 600 Volt Copper Conductors, Flame Retardant Cross Linked Polyethylene (FR-XLPE) 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 B8
2. **Insulation:** Flame Retardant Cross Linked Polyethylene (FR-XLPE)
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 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 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions. UL rated constructions can be used in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502. UL rated constructions with 3 or more conductors are listed for exposed runs (TC-ER) per NEC 336.10.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1277 Electrical Power and Control Tray Cables
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- CSA *CSA marking is available upon request*
- CSA C22.2 No.230 Tray Cables - Rated TC-ER
- 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
- IEEE 1202 FT4 Vertical Tray Flame Test (70,000 Btu/hr) and ICEA T-29-520 - (210,000 Btu/hr)
- VW-1 (Vertical-Wire) Flame Test

SAMPLE PRINT LEGEND:

UL Listed

SOUTHWIRE E75755 {UL} XX AWG X/C FR-XLPE (XHHW-2) CDRS 90°C PVC JKT 600V TYPE TC-ER SUN. RES. DIRECT BURIAL YEAR {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

CSA Listed

SOUTHWIRE #P 156205 CSA XX AWG X/C FR-XLPE CDRS 90C PVC JACKET, -40C, FT-4, SUN RES, DIR BUR, 600V {MM/DD/YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

Non UL Listed

SOUTHWIRE XX AWG X/C FR-XLPE CDRS 90C PVC JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600V {MM/DD/YYYY} {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	Inductive Rectance	Min Bending Radius	Allowable Ampacity 75°C	Allowable Ampacity 90°C	Jacke Colo
	AWG	No.	strands	inch	mil	mil	inch	lb / 1000ft	lb / 1000ft	Ω /1000ft	Ω /1000ft	Ω/1000ft	inch	Amp	Amp	
18 AWG																
624177	18	2	7	0.045	25	45	0.291	10	40	6.669	8.035	0.036	1.1	-	14	Blac
620309	18	4	7	0.045	25	45	0.335	20	61	6.669	8.035	0.036	1.3	-	11	Blac
624176	18	7	7	0.045	25	45	0.329	35	91	6.669	8.035	0.036	1.3	-	10	Blac
604208	18	12	7	0.045	25	45	0.533	60	153	6.669	8.035	0.036	2.1	-	7	Blac
14 AWG																
618791^	14	3	7	0.070	30	45	0.386	38	95	2.631	3.170	0.058	1.5	20	25	Blac
TBA	14	5	7	0.070	30	45	0.449	63	122	2.631	3.170	0.058	1.7	16	20	Blac
TBA	14	6	7	0.070	30	45	0.480	76	143	2.631	3.170	0.058	1.9	16	20	Blac
619481	14	7	7	0.070	30	45	0.503	89	176	2.631	3.170	0.058	2.0	14	17	Blac
619483^	14	9	7	0.070	30	60	0.595	115	231	2.631	3.170	0.058	2.3	14	17	Blac
664329^	14	12	7	0.070	45	60	0.794	153	362	2.631	3.170	0.058	3.2	10	13	Blac
12 AWG																
620306	12	2	7	0.088	30	45	0.392	61	112	1.662	2.002	0.054	1.5	25	30	Blac
619487^	12	4	7	0.088	30	45	0.396	40	88	1.662	2.002	0.054	1.5	20	24	Blac
619488^	12	3	7	0.088	30	45	0.416	61	118	1.662	2.002	0.054	1.6	25	30	Blac
619489^	12	4	7	0.088	30	45	0.453	81	151	1.662	2.002	0.054	1.8	20	24	Blac
619492	12	7	7	0.088	30	60	0.571	142	253	1.662	2.002	0.054	2.2	17	21	Blac
604283^	12	12	7	0.088	30	60	0.742	244	409	1.662	2.002	0.054	2.9	12	15	Blac
620307	12	12	7	0.088	30	60	0.742	244	410	1.662	2.002	0.054	2.9	12	15	Blac
10 AWG																
604018	10	2	7	0.113	30	45	0.440	64	122	1.040	1.253	0.050	1.7	35	40	Blac
604282	10	2	7	0.113	30	45	0.440	64	134	1.040	1.253	0.050	1.7	35	40	Blac
672864^	10	3	7	0.113	30	45	0.467	129	203	1.040	1.253	0.050	1.8	35	40	Blac
620764	10	3	7	0.113	30	45	0.471	97	170	1.040	1.253	0.050	1.8	35	40	Blac
619088^	10	4	7	0.113	30	45	0.510	129	208	1.040	1.253	0.050	2.0	28	32	Blac
604410^@	10	4	19	0.113	30	60	0.557	129	236	1.040	1.253	0.050	2.2	28	32	Blac
604284^	10	4	7	0.113	30	60	0.557	129	237	1.040	1.253	0.050	2.2	28	32	Blac
619090^	10	5	7	0.113	30	60	0.594	161	278	1.040	1.253	0.050	2.3	28	32	Blac
661859	10	7	7	0.113	30	60	0.640	226	354	1.040	1.253	0.050	2.5	24	28	Blac
628428^	10	7	7	0.113	30	60	0.643	226	356	1.040	1.253	0.050	2.5	24	28	Blac
619498^	10	8	7	0.113	30	60	0.696	258	404	1.040	1.253	0.050	2.7	24	28	Blac
673084	10	9	7	0.113	30	60	0.758	291	455	1.040	1.253	0.050	3.0	24	28	Blac
606676^	10	12	7	0.113	30	80	0.887	388	621	1.040	1.253	0.050	3.5	17	20	Blac
8 AWG																
619504!	8	2	7	0.141	45	60	0.598	102	209	0.653	0.786	0.052	2.3	50	55	Blac
619507^	8	3	7	0.141	45	60	0.635	154	289	0.653	0.786	0.052	2.5	50	55	Blac
619508^	8	4	7	0.141	45	60	0.694	205	355	0.653	0.786	0.052	2.7	40	44	Blac
6 AWG																
619511!	6	2	7	0.177	45	60	0.674	163	289	0.411	0.495	0.051	2.7	65	75	Blac

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	AWG	No.	strands	inch	mil	mil	inch	lb / 1000ft	lb / 1000ft	Ω /1000ft	Ω /1000ft	Ω/1000ft	inch	Amp	Amp	
619512^	6	3	7	0.177	45	60	0.712	245	399	0.411	0.495	0.051	2.8	65	75	Blac
619514^	6	4	7	0.177	45	60	0.781	327	526	0.411	0.495	0.051	3.1	52	60	Blac
4 AWG																
619517^	4	3	7	0.225	45	60	0.805	390	577	0.258	0.310	0.048	3.2	85	95	Blac
619518^	4	4	7	0.225	45	80	0.932	520	765	0.258	0.310	0.048	3.7	68	76	Blac
2 AWG																
619524	2	3	7	0.282	45	80	0.981	620	890	0.162	0.195	0.045	3.9	115	130	Blac
661676	2	4	7	0.282	45	80	1.076	827	1142	0.162	0.195	0.045	5.3	92	104	Blac

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
^ UL listed part number
! UL listed TC rated (not TC-ER)
@ Combination unilay stranded 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.
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.