Multi-Conductor CU 600 V FR-XLPE PVC Jacket Control Cable Color Method 1 Table 2

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 2. 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:** 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 66 Fixture Wire
- 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*
- 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
- 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 {UL} XX AWG X/C FR-XLPE CDRS 90C PVC JKT 600V TYPE TC-ER SUN. RES. DIRECT BURIAL YEAR {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

Non UL Listed

SOUTHWIRE XX AWG X/C FR-XLPE CDRS 90C PVC JKT 600V SUN. RES. DIRECT BURIAL YEAR {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

Table 1 – Physical and Electrical Data

Stock Number	Cond. Size	Cond. Number	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	Jacket Color
	AWG	No.	mil	mil	inch	lb / 1000ft	lb / 1000ft	Ω /1000ft	Ω /1000ft	Ω/1000ft	inch	Amp	Amp	
18 AWG														
620556	18	4	25	45	0.334	20	61	6.669	8.035	0.036	1.3	-	11	Black
16 AWG														
606895	16	4	25	45	0.358	32	78	4.181	5.037	0.033	1.4	-	14	Black
623533	16	7	25	45	0.425	56	120	4.181	5.037	0.033	1.7	-	12	Black
623535	16	9	25	45	0.492	72	150	4.181	5.037	0.033	1.9	-	12	Black
14 AWG														
625291^	14	2	30	45	0.357	25	68	2.631	3.170	0.058	1.4	20	25	Black
TBA	14	3	30	45	0.372	38	85	2.631	3.170	0.058	1.4	20	25	Black
624097^	14	4	30	45	0.424	51	112	2.631	3.170	0.058	1.7	16	20	Black
TBA	14	5	30	45	0.443	63	122	2.631	3.170	0.058	1.7	16	20	Black
TBA	14	6	30	45	0.482	76	143	2.631	3.170	0.058	1.9	16	20	Black
TBA	14	7	30	45	0.482	89	161	2.631	3.170	0.058	1.9	14	17	Black
TBA	14	8	30	60	0.552	102	199	2.631	3.170	0.058	2.2	14	17	Black
TBA	14	9	30	60	0.591	115	222	2.631	3.170	0.058	2.3	14	17	Black
TBA	14	10	30	60	0.642	127	245	2.631	3.170	0.058	2.5	10	12	Black
624096^	14	12	30	60	0.669	153	298	2.631	3.170	0.058	2.6	10	12	Black
TBA	14	15	30	60	0.734	191	343	2.631	3.170	0.058	2.9	10	12	Black
662633^	14	19	30	60	0.778	243	441	2.631	3.170	0.058	3.1	10	12	Black
TBA	14	20	30	60	0.812	255	442	2.631	3.170	0.058	3.2	10	12	Black
TBA	14	25	30	80	0.942	319	577	2.631	3.170	0.058	3.7	9	11	Black
TBA	14	30	30	80	0.995	383	674	2.631	3.170	0.058	3.9	9	11	Black
TBA	14	37	30	80	1.072	473	810	2.631	3.170	0.058	5.3	8	10	Black
12 AWG														
TBA	12	2	30	45	0.388	40	87	1.662	2.002	0.054	1.5	25	30	Black
620661	12	2	30	45	0.392	40	88	1.662	2.002	0.054	1.5	25	30	Black
TBA	12	3	30	45	0.411	61	115	1.662	2.002	0.054	1.6	25	30	Black
620722^	12	4	30	45	0.459	81	149	1.662	2.002	0.054	1.8	20	24	Black
607613^	12	4	30	45	0.467	81	152	1.662	2.002	0.054	1.9	20	24	Black
TBA	12	5	30	45	0.491	101	168	1.662	2.002	0.054	1.9	20	24	Black
TBA	12	6	30	60	0.566	122	216	1.662	2.002	0.054	2.2	20	24	Black
607615^	12	7	30	60	0.583	142	259	1.662	2.002	0.054	2.3	17	21	Black
621363	12	7	30	60	0.636	162	293	1.662	2.002	0.054	2.5	17	21	Black
TBA	12	8	30	60	0.637	162	283	1.662	2.002	0.054	2.5	17	21	Black
TBA	12	9	30	60	0.657	183	312	1.662	2.002	0.054	2.6	17	21	Black
TBA	12	10	30	60	0.714	203	337	1.662	2.002	0.054	2.8	12	15	Black
620554^	12	12	30	60	0.742	244	410	1.662	2.002	0.054	2.9	12	15	Black
607650^	12	4	30	60	0.746	244	412	1.662	2.002	0.054	2.9	20	24	Black
622458	12	15	30	80	0.861	305	532	1.662	2.002	0.054	3.4	12	15	Black
TBA	12	19	30	80	0.902	386	626	1.662	2.002	0.054	3.6	12	15	Black

Stock Number	Cond. Size	Cond. Number	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	Jacket Color
	AWG	No.	mil	mil	inch	lb / 1000ft	lb / 1000ft	Ω /1000ft	Ω /1000ft	Ω/1000ft	inch	Amp	Amp	
TBA	12	20	30	80	0.947	406	658	1.662	2.002	0.054	3.7	12	15	Black
TBA	12	25	30	80	1.050	508	805	1.662	2.002	0.054	5.2	11	13	Black
TBA	12	30	30	80	1.110	610	945	1.662	2.002	0.054	5.5	11	13	Black
TBA	12	37	30	80	1.198	752	1142	1.662	2.002	0.054	5.9	10	12	Black
10 AWG														
619086	10	2	30	45	0.444	64	122	1.040	1.253	0.050	1.7	35	40	Black
618887^	10	2	30	45	0.448	64	136	1.040	1.253	0.050	1.7	35	40	Black
620546^	10	3	30	45	0.467	97	169	1.040	1.253	0.050	1.8	35	40	Black
607960	10	4	30	45	0.506	129	211	1.040	1.253	0.050	2.0	28	32	Black
618888^	10	4	30	60	0.558	129	228	1.040	1.253	0.050	2.2	28	32	Black
628424^	10	5	30	60	0.591	161	270	1.040	1.253	0.050	2.3	28	32	Black
619089^	10	7	30	60	0.640	226	354	1.040	1.253	0.050	2.5	24	28	Black
TBA	10	6	30	60	0.641	194	304	1.040	1.253	0.050	2.5	28	32	Black
TBA	10	8	30	60	0.694	258	389	1.040	1.253	0.050	2.7	24	28	Black
TBA	10	9	30	60	0.746	291	435	1.040	1.253	0.050	2.9	24	28	Black
TBA	10	10	30	60	0.814	323	482	1.040	1.253	0.050	3.2	17	20	Black
607647^	10	12	30	80	0.878	388	615	1.040	1.253	0.050	3.5	17	20	Black
619091^	10	12	30	80	0.887	388	624	1.040	1.253	0.050	3.5	17	20	Black
TBA	10	15	30	80	0.976	485	731	1.040	1.253	0.050	3.9	17	20	Black
TBA	10	19	30	80	1.027	614	896	1.040	1.253	0.050	5.1	17	20	Black
TBA	10	20	30	80	1.080	646	944	1.040	1.253	0.050	5.4	17	20	Black
TBA	10	24	30	80	1.200	776	1121	1.040	1.253	0.050	6.0	15	18	Black
TBA	10	25	30	80	1.200	808	1160	1.040	1.253	0.050	6.0	15	18	Black
TBA	10	30	30	80	1.270	970	1368	1.040	1.253	0.050	6.3	15	18	Black
TBA	10	37	30	80	1.373	1196	1659	1.040	1.253	0.050	6.8	14	16	Black
8 AWG														
608026	8	2	45	60	0.584	102	196	0.653	0.786	0.052	2.3	50	55	Black
620553	8	2	45	60	0.598	102	218	0.653	0.786	0.052	2.3	50	55	Black
660713	8	3	45	60	0.640	154	291	0.653	0.786	0.052	2.6	50	55	Black
608059	8	4	45	60	0.678	205	342	0.653	0.786	0.052	2.7	40	44	Black
604092^	8	4	45	60	0.694	205	365	0.653	0.786	0.052	2.7	40	44	Black
607652^	8	4	45	60	0.694	205	354	0.653	0.786	0.052	2.7	40	44	Black
6 AWG														
624095	6	4	45	60	0.781	327	526	0.411	0.495	0.051	3.1	52	60	Black

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.
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.