

Multi-Conductor CU 1000 V FR-XLPE Shielded Thermoset LSZH Jacket Control Cable Color Method 1 Table 1

Control Cable 1000 Volt Copper Conductors, Flame Retardant Cross Linked Polyethylene (FR-XLPE) Insulation Shielded Thermoset SOLONON® Low Smoke Zero Halogen (LSZH-TS) Jacket, Control Cable Conductor Identification Method 1 Table 1. 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:** Flame Retardant Cross Linked Polyethylene (FR-XLPE)
- Filler:** Polypropylene filler on cables with 5 or less conductors
- Binder:** Polyester flat thread binder tape applied for cables with more than 5 conductors
- Shielding:** 5 mils tape shield
- Rip Cord:** Rip cord for ease of jacket removal
- Overall Jacket:** Thermoset SOLONON® Low Smoke Zero Halogen (LSZH-TS) Jacket

APPLICATIONS AND FEATURES:

Southwire's 1000 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 Standard Specification for 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
- 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 Flame Test (70,000) BTU/hr Vertical Tray Test (2 AWG and Larger)
- VW-1 (Vertical-Wire) Flame Test



SAMPLE PRINT LEGEND:**UL Listed**

SOUTHWIRE E75755 {UL} XX AWG X/C FR-XLPE CDRS SHIELDED 90C LSZH JACKET SUNLIGHT RESISTANT DIRECT BURIAL 1000V {MM/DD/YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

Non UL Listed

SOUTHWIRE XX AWG X/C FR-XLPE CDRS 90C LSZH JACKET SUN RES FT-4 DIR BUR 1000V YEAR {SEQUENTIAL FOOTAGE MARKS} SEQ FEET



Table 1 – Physical and Electrical Data

Stock Number	Cond. Size	Cond. Number	Diameter Over Cond.	Insul. Thickness	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 90°C	Min Bending Radius	Allowable Ampacity At 60°C *	Allowable Ampacity 75°C *	Allowable Ampacity 90°C *
	AWG	No.	inch	mil	mil	inch	lb /1000ft	lb /1000ft	Ω /1000ft	Ω /1000ft	inch	Amp	Amp	Amp
14 AWG														
621894	14	7	0.070	45	60	0.627	128	266	2.631	3.423	7.5	11	15	18
621892	14	12	0.070	45	60	0.820	206	419	2.631	3.423	9.8	8	10	13
12 AWG														
626172!	12	7	0.087	45	60	0.676	183	339	1.662	2.162	8.1	14	18	21
10 AWG														
621899	10	4	0.111	30	60	0.561	163	267	1.041	1.353	6.7	24	28	32
621885	10	3	0.111	45	60	0.582	132	246	1.041	1.353	7.0	30	35	40
626152!	10	4	0.111	45	60	0.633	172	300	1.041	1.353	7.6	24	28	32
621887	10	7	0.111	45	60	0.751	272	453	1.041	1.353	9.0	21	25	28
621883	10	10	0.111	45	80	0.992	384	669	1.041	1.353	11.9	15	18	20
623760	10	12	0.111	45	80	1.020	451	767	1.041	1.353	12.2	15	18	20
TBA	10	4	0.113	30	60	0.566	165	253	1.02	1.314	6.7	24	28	32
TBA	8	3	0.142	45	60	0.646	197	324	0.64	0.824	7.8	40	50	55
TBA	8	4	0.142	45	60	0.707	253	383	0.64	0.824	8.5	32	40	44
TBA	6	3	0.178	45	60	0.72	295	443	0.411	0.535	8.6	55	65	75
624410	6	4	0.178	55	80	0.883	387	641	0.411	0.535	10.6	44	52	60
TBA	4	3	0.225	45	60	0.864	449	661	0.258	0.336	10.4	70	85	95
624409	2	2	0.277	55	80	0.962	472	693	0.162	0.211	11.5	95	115	130
TBA	2	3	0.283	45	80	0.987	689	944	0.162	0.211	11.8	95	115	130

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

* Ampacities are based on Table 310.15 (B)(16) of the NEC, 2017 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

^ UL Listed part number

! Copper drain wire under tape shield

