



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:

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
4. **Binder:** Polypropylene tape
5. **Shielding:** 5 mil copper Helically-Applied Tape shield
6. **Rip Cord:** Rip cord for ease of jacket removal
7. **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.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- 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 FR-XLPE CDRS SHIELDED 90C LSZH JACKET SUNLIGHT RESISTANT DIRECT BURIAL 1000V {MMM/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 Reactance	Min Bending Radius	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
14 AWG															
TBA	14	5	7	0.070	45	60	0.614	131	238	2.631	3.170	0.058	7.4	16	20
621894	14	7	7	0.070	45	60	0.640	128	275	2.631	3.170	0.058	7.7	14	17
621892	14	12	7	0.070	45	60	0.872	206	466	2.631	3.170	0.058	10.5	10	12
12 AWG															
660941†	12	4	7	0.088	30	45	0.483	109	181	1.662	2.002	0.054	5.8	20	24
626177!	12	4	7	0.088	45	60	0.588	115	232	1.662	2.002	0.054	7.1	20	24
626172!	12	7	7	0.088	45	60	0.693	183	348	1.662	2.002	0.054	8.3	17	21
660930	12	12	7	0.088	30	60	0.779	291	472	1.662	2.002	0.054	9.3	12	15
626166!	12	12	7	0.088	45	80	0.946	302	592	1.662	2.002	0.054	11.4	12.5	15
10 AWG															
621899†	10	4	7	0.113	30	60	0.578	162	275	1.040	1.253	0.050	6.9	28	32
621885	10	3	7	0.113	45	60	0.592	132	252	1.040	1.253	0.050	4.1	35	40
TBA	10	4	7	0.113	45	60	0.639	171	285	1.02	1.314	0.031	7.7	28	32
626152!	10	4	7	0.113	45	60	0.644	171	307	1.040	1.253	0.050	4.5	28	32
621887	10	7	7	0.113	45	60	0.765	272	464	1.040	1.253	0.050	5.4	24	28
621883	10	10	7	0.113	45	80	1.012	384	686	1.040	1.253	0.050	12.1	17	20
623760	10	12	7	0.113	45	80	1.044	451	788	1.040	1.253	0.050	12.5	17	20
8 AWG															
TBA	8	3	7	0.142	45	60	0.646	197	324	0.64	0.824	0.032	7.8	50	55
TBA	8	4	7	0.142	45	60	0.707	253	383	0.64	0.824	0.032	8.5	40	44
6 AWG															
624410	6	4	7	0.177	55	80	0.901	380	657	0.411	0.495	0.051	6.3	52	60
TBA	6	3	7	0.178	45	60	0.72	295	443	0.411	0.535	0.031	8.6	65	75
4 AWG															
TBA	4	3	7	0.225	45	60	0.864	449	661	0.258	0.336	0.029	10.4	85	95
2 AWG															
624409	2	2	7	0.282	55	80	0.978	472	707	0.162	0.195	0.045	6.8	115	130
TBA	2	3	7	0.282	45	80	0.987	689	944	0.162	0.211	0.027	11.8	115	130

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

! Drain wire

† Rated 600 Volts

* 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.

