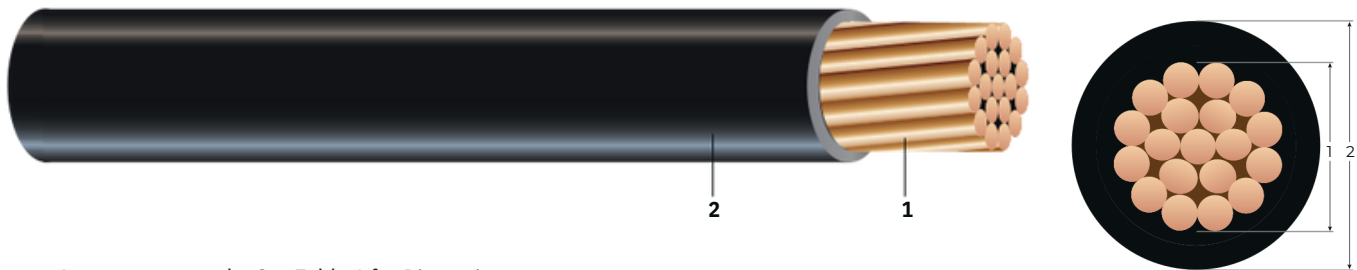


1/C CU 600V LSNH XHHW-2 Power Cable SOLONON *plus*®

SOLONON*plus*® 600Volt Single Conductor Copper Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Insulation Type XHHW-2



Images not to scale. See Table 1 for Dimensions

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** SOLONON*plus*® Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Type XHHW-2

APPLICATIONS AND FEATURES:

Southwire's 600 Volt SOLONON*plus*® Type XHHW-2 cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial and aerially when supported by a messenger. These cables are ideal for use in establishments where low smoke and low acid emissions are desired for public safety and health 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.

- a. The conductors are available in tinned and flexible copper stranding upon request.
- b. NEC compliant
- c. The halogen content is less than 0.2% and Acid gas less than 2.0%
- d. Passes UL VW-1 # 8 AWG and larger
- e. 70,000 BTU/Hr. Vertical Flame Test
- f. UL listed for CT use on 1/0 and Larger
- g. UL listed FT4 and ST-1 (limited smoke)
- h. -40°C Cold impact and cold bend
- i. Oil Resistant I and II
- j. UV/Sunlight resistant black color
- k. Color Available upon request

SPECIFICATIONS:

- ASTM B3 Soft or annealed copper
- ASTM B8 Concentric-lay-standard copper
- ASTM B33 Tin coated copper conductors
- ASTM B170 Oxygen Free Electrolytic Copper (available upon request)
- UL 44 Thermoset Insulated wires and cables
- UL 1685 - Vertical-Tray Fire Propagation and Smoke-Release Test.
- UL 2885 Acid Gas, Acidity and conductivity of combusted materials and assessment of halogens.

SPECIFICATIONS Cont:

- ICEA T-33-655/MIL-C-24643 Low Smoke Halogen Free (LSHF) Polymeric Jackets
- IEEE 1202/FT4 - Vertical-Tray Fire Propagation and Smoke-Release Test (70,000 Btu/hr Vertical Tray Test)
- ISO 9001, ISO 14001 Environmental Standard, RoHS
- ICEA S-95-658 NEMA WC70 - Power Cables Rated 2000 Volts or Less for The Distribution of Electrical Energy
- NFPA 130 and 502

SAMPLE PRINT LEGEND:

SOUTHWIRE SOLONONplus (TM) E30117 #P# (UL) [#AWG Or #kcmil] CU LSZH XLPO Type XHHW-2 -40°C PRI PRII 600V SEQUENTIAL FOOTAGE MARKS

Table 1 – Weights & Measurements

Stock Code	Cond. Size AWG	Strand Count No. of Strands	Dia Over Cond. (1) inches	Insul. Thickness inches	Approx. OD (2) inches	Copper Weight lbs./MFT	Approx. Weight lbs./MFT
		649593	14 Solid 0.064	30	0.124	13	18
		599254◇	12 Solid 0.081	30	0.141	20	27
		599263◇	10 Solid 0.102	30	0.162	32	40
		647361	14 7 0.070	30	0.130	13	18
		649601	12 7 0.087	30	0.147	20	27
		599263	10 7 0.111	30	0.171	32	40
		599328◇	8 7 0.139	45	0.229	51	67
		599337◇	6 7 0.174	45	0.264	81	100
		599346◇	4 7 0.221	45	0.311	129	153
		641691	3 7 0.248	45	0.342	162	182
		599355◇	2 7 0.277	45	0.367	205	235
		643752	1 19 0.321	55	0.432	258	287
		641693	1/0 19 0.360	55	0.472	326	370
		599519	4/0 19 0.510	55	0.608	653	708
		641699	250 37 0.611	65	0.672	772	837
		641703	600 61 0.866	80	1.026	1853	1949

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item



Table 2 – Electrical and Engineering Data

Stock Code	Cond. Size AWG	Min. Bending Radius Inches	Max. Pull Tension lbs.	Resistance		Reactance X_L @ 60Hz Ω /MFT	\emptyset Short Circuit Current 6 Cycles Amps	Allowable Ampacities †		
				DC @ 250C Ω /MFT	AC @ 900C Ω /MFT			60 0C Amps	75 0C Amps	90 0C Amps
649593	14	0.5	33	2.630	3.288	0.036	935	15	15	15
599254◇	12	0.6	52	1.660	2.075	0.034	1485	20	20	20
599263◇	10	0.7	83	1.040	1.300	0.032	2360	29	30	30
647361	14	0.5	33	2.630	3.288	0.036	935	15	15	15
649601	12	0.6	52	1.660	2.075	0.034	1485	20	20	20
599263	10	0.7	83	1.040	1.300	0.032	2360	29	30	30
599328◇	8	0.9	132	0.652	0.815	0.033	3754	40	48	55
599337◇	6	1.1	210	0.411	0.514	0.031	5966	55	66	75
599346◇	4	1.2	334	0.258	0.323	0.030	9491	70	84	95
643752	3	1.4	420	0.214	0.285	0.029	12097	85	100	110
599355◇	2	1.5	531	0.162	0.203	0.028	15089	96	115	130
643752	1	1.7	670	0.134	0.174	0.028	19029	110	130	145
641693	1/0	1.9	845	0.102	0.128	0.028	24011	125	150	170
599519	4/0	2.5	1693	0.051	0.064	0.027	48114	195	230	260
641699	250	2.8	2000	0.043	0.055	0.027	56845	215	255	290
641703	600	5.1	4800	0.018	0.024	0.026	136428	350	420	475

† 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)

◇ Cable marked with this symbol is a standard stock item

