

CU 600V LSZH XHHW-2 SOLONONplus® FT4, VW-1

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



CONSTRUCTION:

- Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8; Tinned copper per ASTM B33 available upon request
- Insulation:** SOLONONplus® Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Type XHHW-2

APPLICATIONS AND FEATURES:

APPLICATION

Southwire's 600 Volt SOLONONplus® Type XHHW-2 cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, 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.

FEATURES

- The conductors are available in tinned and flexible copper stranding upon request.
- NEC compliant
- The halogen content is less than 0.2% and Acid gas less than 2.0%
- UL listed VW-1
- UL listed FT4/IEEE 1202 and ST-1
- UL listed for CT use on 1/0 and Larger
- -40°C Cold impact and cold bend
- Oil Resistant I and II
- Gasoline Resistance I and II
- Sunlight Resistant

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded 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 (1/0 and Larger)
- UL 2885 Acid Gas, Acidity and conductivity of combusted materials and assessment of halogens
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy



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- ICEA T-33-655/MIL-C-24643 Low Smoke Halogen Free (LSHF) Polymeric Jackets
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- RoHS-2 (European Directive 2011/65/EU)
- ISO 9001 Quality management
- NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems (#8 AWG and larger)
- NFPA 502 Standard for Road Tunnels, Bridges, and Other Limited Access Highways

SAMPLE PRINT LEGEND:

14 AWG thru 1 AWG

SOUTHWIRE SOLONONplus{TM} LSZH XLPO E30117 (UL) XX AWG CU TYPE XHHW-2-HF VW-1 600V PRI PRII GRI GRII -40{D}
C SR FT4 ST-1

1/0 AWG and Larger

{SQFTG} SOUTHWIRE SOLONONplus{TM} LSZH XLPO E30117 {UL} XX AWG/KCMIL CU TYPE XHHW-2-HF VW-1 600V PRI
PRII GRI GRII -40{D}C SR FT4 ST-1 CT**Table 1 – Physical and Electrical Data**

Stock Number	Cond. Size	Strand Count	Cond. Cmil	Diameter Over Conductor	Insul. Thickness	Approx. OD	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 75°C	Max Pull Tension
	AWG/kcmil	No. of Strands	cmil	inch	mil	inch	lb/1000ft	Ω/1000ft	Ω/1000ft	lb
666081	14	7	4110	0.070	30	0.133	20	2.631	3.170	33
666087	12	7	6530	0.087	30	0.151	29	1.662	2.002	52
139436	10	7	10380	0.113	30	0.177	43	1.040	1.253	83
139488	8	7	16510	0.142	45	0.236	72	0.653	0.786	132
139477	6	7	26240	0.178	45	0.272	106	0.411	0.495	210
139459	4	7	41740	0.225	45	0.319	160	0.258	0.310	334
139454	3	7	52620	0.252	45	0.346	197	0.205	0.246	421
139445	2	7	66360	0.277	45	0.371	242	0.162	0.154	531
139430	1	19	83690	0.322	55	0.438	311	0.128	0.154	670
139434	1/0	19	105600	0.362	55	0.478	385	0.102	0.122	845
139452	2/0	19	133100	0.406	55	0.522	476	0.081	0.097	1065
139455	3/0	19	167800	0.456	55	0.572	591	0.064	0.079	1342
139469	4/0	19	211600	0.498	55	0.614	732	0.051	0.062	1693
139453	250	37	250000	0.542	65	0.678	871	0.043	0.053	2000
139456	300	37	300000	0.594	65	0.730	1034	0.036	0.045	2400
139457	350	37	350000	0.641	65	0.777	1197	0.031	0.038	2800
139470	400	37	400000	0.685	65	0.821	1359	0.027	0.033	3200
139475	500	37	500000	0.766	65	0.902	1681	0.022	0.032	4000
139485	600	61	600000	0.840	80	1.008	2038	0.018	0.025	4800
139486	750	61	750000	0.968	80	1.136	2527	0.014	0.021	6000

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item



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Table 3 - Stock Code Colors (Black in Table 1)

Size	Red	Blue	White	Brown	Orange	Yellow	Gray	Green	Purple
14 AWG	666084	666076	666078	666079	666083	666077	666082	666080	666085
12 AWG	666092	666086	666093	666088	666091	666094	666090	666089	
10 AWG	139441	139435	139442	139437	139440	139443	139439	139438	
8 AWG	139493	139487	139494	139489	139492	139495	139491	139490	
6 AWG	139482	139476	139483	139478	139481	139484	139480	139479	
4 AWG	139464	139458	139465	139460	139463	139466	139462	139461	
2 AWG	139449	139444	139450	139446	139448	139451		139447	
1 AWG			139429					139428	
1/0 AWG	139433		139431					139432	
2/0 AWG									
3/0 AWG									
4/0 AWG			139467					139468	
250 KCMIL									
300 KCMIL									
350 KCMIL									
500 KCMIL					139472	139473	139471	139474	
600 KCMIL									
750 KCMIL									

