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



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8; Tinned copper per ASTM B33 available upon request
2. **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

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- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- 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
- NFPA 502 Standard for Road Tunnels, Bridges, and Other Limited Access Highways (non-emergency circuits only)

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 Class	Strand Count	Cond. Cmil	Diameter Over Conductor	Insul. Thickness	Jacket Color	Approx. OD	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 75°C
	AWG/ kcmil		No. of Strands	cmil	inch	mil		inch	lb/1000ft	Ω/1000ft	Ω/1000ft
666085	14	B	7	4110	0.071	30	PE	0.135	20	2.631	3.265
666089	12	B	7	6530	0.089	30	GN	0.153	29	1.662	2.063
139438	10	B	7	10380	0.113	30	GN	0.177	43	1.04	1.291
139490	8	B	7	16510	0.142	45	GN	0.236	72	0.653	0.81
139479	6	B	7	26240	0.178	45	GN	0.272	106	0.411	0.51
139461	4	B	7	41740	0.225	45	GN	0.319	160	0.258	0.32
139454	3	B	7	52620	0.252	45	BK	0.346	197	0.205	0.254
139447	2	B	7	66360	0.283	45	GN	0.377	243	0.162	0.201
139428	1	B	19	83690	0.322	55	GN	0.438	311	0.128	0.159
139432	1/0	B	19	105600	0.362	55	GN	0.478	385	0.102	0.127
139452	2/0	B	19	133100	0.405	55	BK	0.522	476	0.082	0.102
139455	3/0	B	19	167800	0.456	55	BK	0.572	591	0.064	0.079
139468	4/0	B	19	211600	0.512	55	GN	0.614	732	0.051	0.063
139453	250	B	37	250000	0.558	65	BK	0.678	871	0.043	0.053
139456	300	B	37	300000	0.611	65	BK	0.73	1034	0.036	0.045
139457	350	B	37	350000	0.661	65	BK	0.777	1197	0.031	0.039
139470	400	B	37	400000	0.706	65	BK	0.821	1359	0.027	0.035
139474	500	B	37	500000	0.789	65	GN	0.902	1681	0.021	0.027
139485	600	B	61	600000	0.866	80	BK	1.008	2038	0.018	0.024
139486	750	B	61	750000	0.968	80	BK	1.136	2527	0.014	0.019
TBA	1000	B	61	1000000	1.117	80	BK	1.289	3240	0.011	0.016
TBA	1250	B	91	1250000	1.25	95	BK	1.44	4068	0.008	0.013

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

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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.

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

Size (Strand)	Black	Red	Blue	White	Brown	Orange	Yellow	Gray	Green	Purple
14 (7)	666081	666084	666076	666078	666079	666083	666077	666082	666080	666085
12 (7)	666087	666092	666086	666093	666088	666091	666094	666090	666089	
10 (7)	139436	139441	139435	139442	139437	139440	139443	139439	139438	
8 (7)	139488	139493	139487	139494	139489	139492	139495	139491	139490	
6 (7)	139477	139482	139476	139483	139478	139481	139484	139480	139479	
4 (7)	139459	139464	139458	139465	139460	139463	139466	139462	139461	
3 (7)	139454									
2 (7)	139445	139449	139444	139450	139446	139448	139451		139447	
1 (19)	139430			139429					139428	
1/0 (19)	139434	139433		139431					139432	
2/0 (19)	139452									
3/0 (19)	139455									
4/0 (19)	139469			139467					139468	
250 (37)	139453									
300 (37)	139456									
350 (37)	139457									
400 (37)	139470									
500 (37)	139475					139472	139473	139471	139474	
600 (61)	139485									
750 (61)	139486									

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