CU 600V LSZH XHHW-2 SOLONONplus®

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
2. **Insulation:** SOLONONplus® Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Type XHHW-2

APPLICATIONS AND FEATURES:

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.

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/IEEE 1202 and ST-1 (#8 and larger)
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 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
- 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

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- 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:

SOUTHWIRE SOLONONplus{TM} E30117 {UL} AWG XX BARE OR TINNED CU LSZH XLPO TYPE XHHW-2 HF -40°C SR PRI PRII FT4 ST-1 600V {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

Table 1 – Physical and Electrical Data

Stock Number	Cond. Size	Strand Count	Cond. Cmil	Insul. Thickness	Approx. OD	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 75°C
	AWG/kcmil	No. of Strands	cmil	mil	inch	lb/1000ft	Ω/1000ft	Ω/1000ft
649593	14	Solid	4110	30	0.128	18	2.631	3.170

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
^ # 6AWG Stock Number 679070 is Tinned Copper Conductor

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

Size	Red	Blue	White	Brown	Orange	Yellow	Gray	Green	Purple
12 (Solid)	599255	599256	599253	599258	599259	599260	599257	599252	647516
10 (Solid)	599264	599265	599262	599281	599282	599283	599280	599261	
14 (19)	643917								
12 (19)	677425*			646526	646527	646528		646529	
10 (19)	646530	646531	646532					646533	
8 (19)	599331	599329		599333	599335	599336	599334	599330	
6 (19)	599340	599338	599341	599342	599344	599345	599343	599339	
4 (19)	599349	599347	599350	599351	599353	599354	599352	599348	
2 (19)	599358	599356	599359	599360	599507	599508	599505	599357	
1/0 (19)								641694	
2/0 (19)								679228*	
250 (37)				679131*					
500 (37)								641702	

*Tinned Copper per ASTM B33