

CU 600V or 1000V LSZH XHHW-2 SOLONONplus®

SOLONONplus® 600Volt or 1000V Single Conductor Copper Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Insulation Type XHHW-2



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 or 1000 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
- 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 (#2 and larger)
- h. -40°C Cold impact and cold bend
- i. Oil Resistant I and II
- j. UV/Sunlight resistant
- k. Color Available upon request
- l. PRI oil resistance at 60°C
- m. PR II oil resistance at 75°C
- n. GRI gasoline and oil resistance
- o. GR II gasoline and oil resistance

SPECIFICATIONS:

- ASTM B3 Standard Specification for 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)



Southwire

**CABLETECH
SUPPORT™**

Services

- 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
- RoHS-2 (European Directive 2011/65/EU)
- ISO 9001 Quality management
- ISO 14001 Environmental management systems standard
- NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems (#2 and larger)
- NFPA 502 Standard for Road Tunnels, Bridges, and Other Limited Access Highways

SAMPLE PRINT LEGEND:

- 1/0 AWG and larger cables
SOUTHWIRE SOLONONplus (TM) LSZH XLPO E30117 MASTER-DESIGN (UL) AWG XX CU TYPE XHHW-2-HF VW-1600V or 1000V PRI PRII GRI GRII-40(D)C SR FT4 ST-1 CT (SEQUENTIAL FOOTAGE MARKS) SEQ FEET [date code]
- 2 AWG and 1 AWG
SOUTHWIRE SOLONONplus (TM) LSZH XLPO E30117 MASTER-DESIGN (UL) AWG XX CU TYPE XHHW-2-HF VW-1600V or 1000V PRI PRII GRI GRII-40(D)C SR FT4 ST-1 (SEQUENTIAL FOOTAGE MARKS) SEQ FEET [date code]
- 14 AWG to 4 AWG
SOUTHWIRE SOLONONplus (TM) LSZH XLPO E30117 MASTER-DESIGN (UL) AWG XX CU TYPE XHHW-2-HF VW-1600V or 1000V PRI PRII GRI GRII-40(D)C SR (SEQUENTIAL FOOTAGE MARKS) SEQ FEET [date code]

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Strand Count	Diameter Over Conductor	Insul. Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/Kcmil	No. of Strands	inch	mil	inch	lb/1000ft	lb/1000ft
673978◊	500	37	0.789	65	0.919	1544	1648

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

Tinned Copper Conductor

Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	Shield Short Circuit Current 6 Cycles	Allowable Ampacity At 60°C†	Allowable Ampacity At 75°C†	Allowable Ampacity At 90°C†
	AWG/Kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp	Amp
673978◊	500	3.7	4000	0.022	0.029	0.025	113690	319	381	430

† 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)

