

# CU 600V or 1000V LSZH XHHW-2 SOLONONplus® Living Building Challenge™ (LBC) Red List Free

SOLONONplus® 600Volt or 1000V 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 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. PRII oil resistance at 75°C
- n. GRI gasoline and oil resistance
- o. GRII gasoline and oil resistance
- p. REACH & RoHS compliant
- q. Listed and marked HAL-FREE (Halogen Free) per CSA 2556-15
- r. Living Building Challenge™ (LBC) Red List Free

## SPECIFICATIONS:



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | [www.southwire.com](http://www.southwire.com)

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Southwire

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- 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
- 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 (1/0 AWG 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 (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 (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 (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 – Physical and Electrical Data

| Stock Number        | Cond. Size | Strand Class | 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             |
| 673577              | 14         | B            | 7              | 4110       | 30               | 0.133      | 20             | 2.631                | 3.17                 |
| 673578              | 12         | B            | 7              | 6530       | 30               | 0.151      | 28             | 1.662                | 2.002                |
| 673614              | 10         | B            | 7              | 10380      | 30               | 0.177      | 42             | 1.04                 | 1.253                |
| 673560 <sup>◇</sup> | 8          | B            | 7              | 16510      | 45               | 0.236      | 71             | 0.653                | 0.786                |
| 673629 <sup>◇</sup> | 6          | B            | 7              | 26240      | 45               | 0.272      | 105            | 0.411                | 0.495                |
| 673645 <sup>◇</sup> | 4          | B            | 7              | 41740      | 45               | 0.319      | 158            | 0.258                | 0.31                 |
| 673881              | 3          | B            | 7              | 52620      | 45               | 0.346      | 195            | 0.205                | 0.246                |
| 673652 <sup>◇</sup> | 2          | B            | 7              | 66360      | 45               | 0.371      | 240            | 0.162                | 0.195                |
| 673677 <sup>◇</sup> | 1          | B            | 19             | 83690      | 55               | 0.438      | 309            | 0.128                | 0.154                |
| 673664 <sup>◇</sup> | 1/0        | B            | 19             | 105600     | 55               | 0.478      | 382            | 0.102                | 0.122                |
| 673904 <sup>◇</sup> | 2/0        | B            | 19             | 133100     | 55               | 0.522      | 473            | 0.081                | 0.097                |
| 679557              | 3/0        | B            | 19             | 167800     | 55               | 0.572      | 574            | 0.064                | 0.078                |
| 673917 <sup>◇</sup> | 3/0        | B            | 19             | 167800     | 55               | 0.572      | 588            | 0.064                | 0.078                |
| 673929 <sup>◇</sup> | 4/0        | B            | 19             | 211600     | 55               | 0.614      | 729            | 0.051                | 0.062                |
| 673941 <sup>◇</sup> | 250        | B            | 37             | 250000     | 65               | 0.678      | 867            | 0.043                | 0.053                |
| 673955 <sup>◇</sup> | 350        | B            | 37             | 350000     | 65               | 0.777      | 1192           | 0.031                | 0.039                |
| TBA                 | 400        | B            | 37             | 400000     | 65               | 0.835      | 1316           | 0.027                | 0.035                |
| 673978 <sup>◇</sup> | 500        | B            | 37             | 500000     | 65               | 0.902      | 1676           | 0.022                | 0.029                |
| 673990              | 600        | B            | 61             | 600000     | 80               | 1.034      | 2036           | 0.018                | 0.025                |
| TBA                 | 750        | B            | 61             | 750000     | 80               | 1.128      | 2453           | 0.014                | 0.022                |
| TBA                 | 1000       | B            | 61             | 1000000    | 80               | 1.277      | 3244           | 0.011                | 0.018                |

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

Tinned Copper Conductor

## Size and Color

| Size | Color | Stock Code |
|------|-------|------------|
| 2/0  | Green | 673896     |

