# 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


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- 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:

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 Class | Strand Count | Cond. Cmil | Cond. Number | 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 | No. | inch | mil | | inch | lb/1000ft | Ω/1000ft | Ω/1000ft |
| 646542 | 10 | B | 7 | 10380 | 1 | 0.113 | 30 | BK | 0.177 | 40 | 1.040 | 1.253 |

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
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

| Size (Strand) | Black | Red | Blue | White | Brown | Orange | Yellow | Gray | Green | Purple |
|---|---|---|---|---|---|---|---|---|---|---|
| 14 (Solid) | 649593 | | | | | | | | | |
| 12 (Solid) | 599254 | 599255 | 599256 | 599253 | 599258 | 599259 | 599260 | 599257 | 599252 | 647516 |
| 10 (Solid) | 599263 | 599264 | 599265 | 599262 | 599281 | 599282 | 599283 | 599280 | 599261 | |
| 14 (7) | 647361 | 643917 | | | | | | | | |
| 12 (7) | | 677425 | | | 646526 | 646527 | 646528 | 649601 | 646529 | |
| 10 (7) | 646542 | 646530 | 646531 | 646532 | | | | | 646533 | |
| 8 (7) | 599328 | 599331 | 599329 | | 599333 | 599335 | 599336 | 599334 | 599330 | |
| 6 (7) | 679070 | 599340 | 599338 | 599341 | 599342 | 599344 | 599345 | 599343 | 599339 | |
| 4 (7) | 599346 | 599349 | 599347 | 599350 | 599351 | 599353 | 599354 | 599352 | 599348 | |
| 3 (7) | 641691 | | | | | | | | | |
| 2 (7) | 599355 | 599358 | 599356 | 599359 | 599360 | 599507 | 599508 | 599505 | 599357 | |
| 1 (19) | 643752 | | | | | | | | | |
| 1/0 (19) | 641693 | | | | | | | | 641694 | |
| 2/0 (19) | 599509 | | | | | | | | 679228 | |
| 4/0 (19) | 599519 | | | | | | | | | |
| 250 (37) | 641699 | | | | 679131 | | | | | |
| 300 (37) | 649645 | | | | | | | | | |
| 500 (37) | | | | | | | | | 641702 | |
| 600 (61) | 641703 | | | | | | | | | |


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