# CU 600V LSZH RHH/RHW-2/RW90 SOLONONplus™

SOLONONplus™ 600Volt Single Conductor Copper Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Insulation Type RHH/RHW-2/RW90

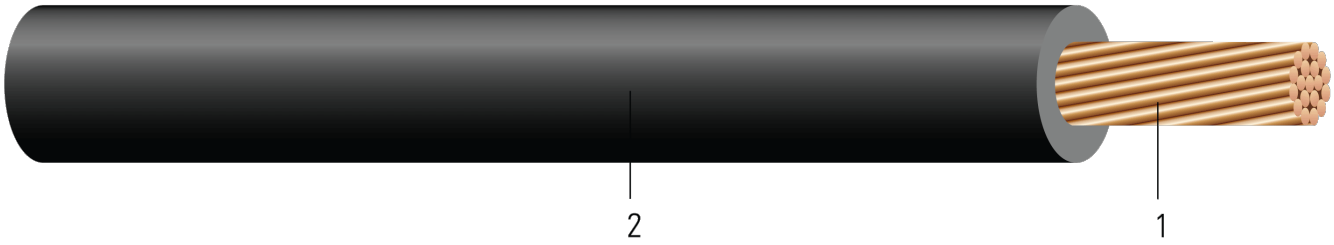



Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare or tinned copper per ASTM B3, ASTM B8 and ASTM B33.
2. **Insulation:** SOLONONplus™ Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Type RHH/RHW-2/RW90

## APPLICATIONS AND FEATURES:

Southwire's 600 Volt SOLONONplus™ Type RHH/RHW-2/RW90 cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, and as otherwise permitted by the NEC® for Type RHH/RHW-2 or the CE Code for Type RW90. 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. 70,000 BTU/Hr. Vertical Flame Test
e. UL listed for CT use on 1/0 and Larger
f. UL listed FT4 and ST-1 (limited smoke)
g. -40°C Cold impact and cold bend
h. Gasoline and Oil Resistant GRI and GRII
i. UV/Sunlight resistant all colors
j. Color available upon request

## SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- ASTM B170 Oxygen Free Electrolytic Copper (available upon request)
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1685 FT4 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
- CSA C22.2 No. 38 Thermoset-insulated wires and cables



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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
- ISO 14001 Environmental management systems standard
- 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:

{SQFTG} SOUTHWIRE SOLONONplus{TM} E30117 (UL) XX AWG (X.XXmm2) CU LSZH XLPO TYPE RHH OR RHW-2 -40°C FT4 ST1 SR PRI PRII GRI GRII 600V --- (CSA) LL90458 TYPE RW90 600V -40°C FT4 ST1 TC-ER SR PRI PRII GRI GRII

## 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 | Max Pull Tension |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AWG/ kcmil | | No. of Strands | cmil | No. | inch | mil | | inch | lb/1000ft | Ω/1000ft | Ω/1000ft | lb |
| 648905 | 3/0 | B | 19 | 167800 | 1 | 0.456 | 80 | GN | 0.624 | 614 | 0.064 | 0.079 | 1342 |

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
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 |
|---|---|---|---|---|---|---|---|---|---|
| 14 (7) | 643665 | 646600 | | 677498 | | | | | 677499 |
| 12 (7) | 643666 | 644382 | 644383 | 644389 | 644384 | 644386 | 644387 | 644388 | 644381 |
| 10 (7) | 643667 | 644391 | 644392 | 644396 | 644394 | 644395 | 646493 | 646492 | 644390 |
| 8 (7) | 643668 | 646602 | 646603 | 646605 | 647101 | 647102 | 647103 | 647104 | 646601 |
| 6 (7) | 643669 | 646581 | 646582 | 646587 | 646583 | 646584 | 646585 | 646586 | 644257 |
| 4 (7) | 643670 | 647105 | 647106 | 647108 | 646595 | 646597 | 646598 | 646599 | 646594 |
| 3 (7) | 646618 | 647109 | 647111 | 647112 | 646614 | 646615 | 646616 | 646617 | 646613 |
| 2 (7) | 643671 | | | | 646590 | 646591 | 646592 | 646593 | 646589 |
| 1 (19) | 643672 | 647114 | 647116 | 647117 | 646624 | 646625 | 646626 | 646627 | 647113 |
| 1/0 (19) | 643673 | 644398 | 644399 | 644400 | 647118 | 647119 | 647120 | 647121 | 644397 |
| 2/0 (19) | 643674 | 647122 | 647124 | 647129 | 647125 | 647126 | 647127 | 647128 | 649622 |
| 3/0 (19) | 643675 | 647130 | 647132 | 647133 | 646619 | 646621 | 646622 | 646623 | 648905 |
| 4/0 (19) | 643677 | 647134 | 647135 | 647572 | 647136 | 647569 | 647570 | 647571 | 644380 |
| 250 (37) | 643678 | 646606 | 647573 | 646607 | 647574 | 647575 | 647576 | 647577 | |
| 350 (37) | 643679 | | | 647588 | 647583 | 647584 | 647585 | 647587 | |
| 500 (37) | 643680 | | | 647589 | 646608 | 646609 | 646610 | 646611 | |
| 600 (61) | 647653 | | | | 647590 | 647591 | 647592 | 647593 | |
| 750 (61) | 643826 | | | | | | | | |
| 1000 (61) | 643827 | | | | | | | | |


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