

## CU 600V LSZH RHH/RHW-2 SOLONON<sup>plus</sup>®

SOLONON<sup>plus</sup>® 600Volt Single Conductor Copper Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Insulation Type RHH/RHW-2 USE-2

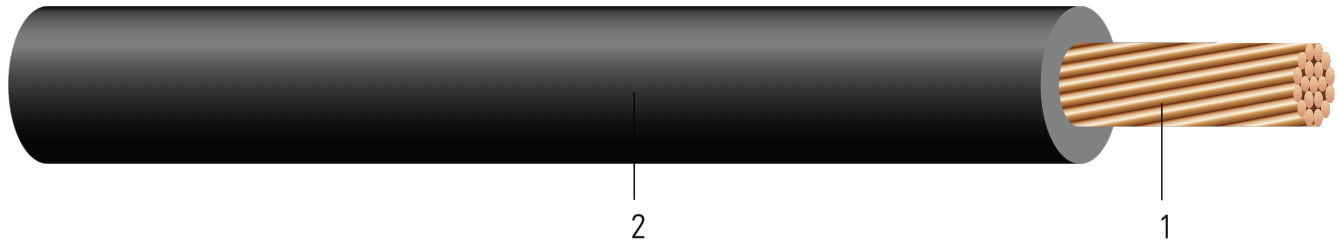


Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare or tinned copper per ASTM B3, ASTM B8 and ASTM B33.
2. **Insulation:** SOLONON<sup>plus</sup>® Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Type RHH/RHW-2 USE-2

### APPLICATIONS AND FEATURES:

Southwire's 600 Volt SOLONON<sup>plus</sup>® Type RHH/RHW-2 USE-2 cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial 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 #10 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 and ST-1 (limited smoke)
- h. -40°C Cold impact and cold bend
- i. Gasoline and Oil Resistant GRI and GRIL
- j. UV/Sunlight resistant all colors
- k. Color available upon request
- l. Rated for direct burial

### SPECIFICATIONS:

- ASTM B3 Standard Specification for 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 854 Service Entrance Cable
- 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
- 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

**SAMPLE PRINT LEGEND:**

{SQFTG} SOUTHWIRE SOLONONplus{TM} E30117 MASTER-DESIGN (UL) XX AWG (X.XXmm<sup>2</sup>) CU LSZH XLPO TYPE RHH OR RHW-2 -40{D}C FT4 ST1 SR PRI PRII GRI GRII 600V --- (CSA) LL90458 TYPE RW90 600V -40{D}C FT4 ST1 TC-ER SR PRI PRII GRI GRII

**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
643670	4	7	0.221	60	0.341	129	162

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
643670	4	1.4	334	0.258	0.323	0.032	9491	70	84	95

† 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)

