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

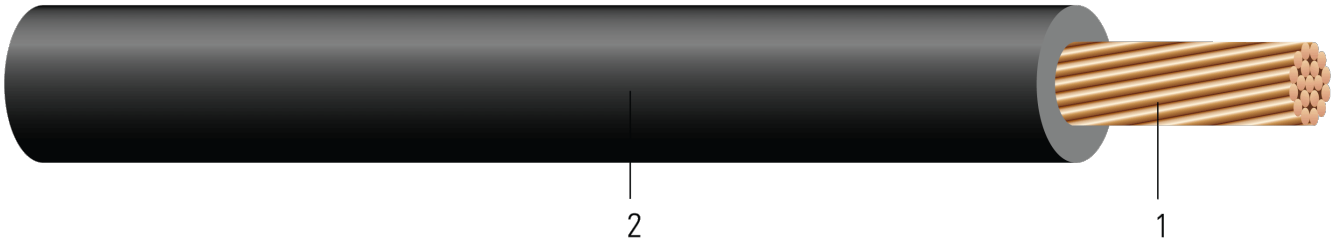

Image not to scale. See Table 1 for dimensions.

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
647103	8	B	7	16510	1	0.141	60	YW	0.268	77	0.653	0.786	132

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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