



CU 600V LSZH RHH/RHW-2 SOLONONplus®

SOLONONplus® 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:** SOLONONplus® Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Type RHH/RHW-2 USE-2

APPLICATIONS AND FEATURES:

Southwire's 600 Volt SOLONONplus® 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. 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 GRIL
- i. UV/Sunlight resistant all colors
- j. Color available upon request
- k. Rated for direct burial

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 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 (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	Insul. Thickness	Approx. OD	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 75°C	Max Pull Tension
	AWG/kcmil		No. of Strands	cmil	mil	inch	lb/1000ft	Ω/1000ft	Ω/1000ft	lb
643665	14	B	7	4110	45	0.164	24	2.631	3.170	32
643666	12	B	7	6530	45	0.183	33	1.662	2.002	52
643667	10	B	7	10380	45	0.207	47	1.040	1.253	83
643668	8	B	7	16510	60	0.268	77	0.653	0.786	132
643669	6	B	7	26240	60	0.304	112	0.411	0.495	209
643670	4	B	7	41740	60	0.351	167	0.258	0.310	333
646618	3	B	7	52620	60	0.378	204	0.205	0.246	420
643671	2	B	7	66360	60	0.409	251	0.162	0.195	530
643672	1	B	19	83690	80	0.490	329	0.128	0.154	669
643673	1/0	B	19	105600	80	0.530	404	0.102	0.122	844
643674	2/0	B	19	133100	80	0.574	497	0.081	0.097	1064
643675	3/0	B	19	167800	80	0.624	614	0.064	0.078	1342
643677	4/0	B	19	211600	80	0.680	759	0.051	0.062	1692
643678	250	B	37	250000	95	0.758	909	0.043	0.053	2000
643679	350	B	37	350000	95	0.841	1236	0.031	0.039	2800
557136	500	B	37	500000	95	0.989	1733	0.022	0.029	4000
643680	500	B	37	500000	95	0.989	1731	0.022	0.029	4000
647653	600	B	61	600000	110	1.098	2090	0.018	0.025	4800
643826	750	B	61	750000	110	1.200	2579	0.014	0.022	6000
643827	1000	B	61	1000000	110	1.349	3388	0.011	0.018	8000

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

Tinned Copper Conductor

