

TCU 600V LSZH RHH/RHW-2/RW90 SOLONONplus™

SOLONONplus™ 600 Volt Single Conductor Tinned 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 tinned copper per ASTM B3 and B33
2. **Insulation:** Black 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.

1. NEC compliant
2. The halogen content is less than 0.2% and Acid gas less than 2.0%
3. 70,000 BTU/Hr. Vertical Flame Test
4. UL listed for CT use on 1/0 AWG and larger
5. UL listed FT4 and ST-1 (limited smoke)
6. -40°C Cold impact and cold bend
7. Gasoline and Oil Resistant GRI and GRIL
8. UV/Sunlight resistant

SPECIFICATIONS:

- 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
- 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) TCU 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

Cond. Size	Strand Class	Strand Count	Cond. Cmil	Diameter Over Conductor	Insul. Thickness	Jacket Color	Approx. OD	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 75°C	Max Pull Tension
AWG/kmil		No. of Strands	cmil	inch	mil		inch	lb/1000ft	Ω/1000ft	Ω/1000ft	lb
14	B	7	4110	0.070	45	BK	0.165	24	2.631	3.170	32
12	B	7	6530	0.088	45	BK	0.183	33	1.662	2.002	52
10	B	7	10380	0.113	45	BK	0.207	47	1.040	1.253	83
8	B	7	16510	0.141	60	BK	0.268	77	0.653	0.786	132
6	B	7	26240	0.177	60	BK	0.304	112	0.411	0.495	209
4	B	7	41740	0.225	60	BK	0.351	167	0.258	0.310	333
3	B	7	52620	0.252	60	BK	0.378	204	0.205	0.246	420
2	B	7	66360	0.282	60	BK	0.409	251	0.162	0.195	530
1	B	19	83690	0.322	80	BK	0.490	329	0.128	0.154	669
1/0	B	19	105600	0.361	80	BK	0.530	404	0.102	0.122	844
2/0	B	19	133100	0.405	80	BK	0.574	497	0.081	0.097	1064
3/0	B	19	167800	0.456	80	BK	0.624	614	0.064	0.078	1342
4/0	B	19	211600	0.512	80	BK	0.680	759	0.051	0.062	1692
250	B	37	250000	0.558	95	BK	0.758	909	0.043	0.053	2000
350	B	37	350000	0.661	95	BK	0.841	1236	0.031	0.039	2800
500	B	37	500000	0.789	95	BK	0.989	1731	0.022	0.029	4000
600	B	61	600000	0.865	110	BK	1.072	2084	0.018	0.025	4800
750	B	61	750000	0.968	110	BK	1.200	2579	0.014	0.022	6000
1000	B	61	1000000	1.117	110	BK	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

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.

