



## TCU 600V LSZH XHHW-2 SOLONONplus™ FT4, VW-1

SOLONONplus™ 600 Volt Single Conductor Tinned Copper Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Insulation Type XHHW-2

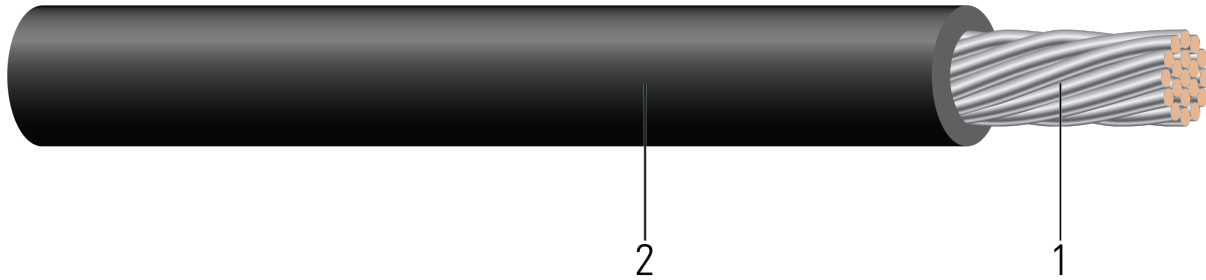


Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** Solid tinned copper per ASTM B3 or Class B compressed stranded tinned copper per ASTM B3 and B33
2. **Insulation:** Black or green SOLONONplus™ Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Type XHHW-2

### APPLICATIONS AND FEATURES:

#### APPLICATION

Southwire's 600 Volt SOLONONplus™ Type XHHW-2 cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, 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.

#### FEATURES

1. NEC compliant
2. The halogen content is less than 0.2% and Acid gas less than 2.0%
3. UL listed VW-1
4. UL listed FT4/IEEE 1202 and ST-1
5. UL listed for CT use on 1/0 AWG and larger
6. -40°C Cold impact and cold bend
7. Oil Resistant I and II
8. Gasoline Resistance I and II
9. 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 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
- 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:**

**14 AWG to 1 AWG**

SOUTHWIRE SOLONONplus™ LSZH XLPO E30117 (UL) XX AWG TCU TYPE XHHW-2-HF VW-1 600V PRI PRII GRI GRII -40°C SR FT4 ST-1

**1/0 AWG and Larger**

{SQFTG} SOUTHWIRE SOLONONplus™ LSZH XLPO E30117 {UL} XX AWG/KCMIL TCU TYPE XHHW-2-HF VW-1 600V PRI PRII GRI GRII -40°C SR FT4 ST-1 CT

**Table 1 – Physical and Electrical Data**

Stock Number	Cond. Size	Strand Class	Strand Count	Cond. Cmil	Diameter Over Conductor	Insul. Thickness	Approx. OD	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 75°C	Max Pull Tension
	AWG/kcmil		No. of Strands	cmil	inch	mil	inch	lb/1000ft	Ω/1000ft	Ω/1000ft	lb
459674	14	Solid	1	4110	0.064	30	0.128	20	2.631	3.264	33
TBA	14	B	7	4110	0.070	30	0.133	20	2.631	3.170	33
459673	12	Solid	1	6530	0.081	30	0.145	29	1.662	2.062	52
459678	12	B	7	6530	0.087	30	0.153	29	1.662	2.002	52
459672	10	Solid	1	10380	0.102	30	0.166	41	1.040	1.291	83
459677	10	B	7	10380	0.113	30	0.177	43	1.040	1.253	83
459688	8	B	7	16510	0.142	45	0.236	72	0.653	0.786	132
459686	6	B	7	26240	0.178	45	0.272	106	0.411	0.495	210
459682	4	B	7	41740	0.225	45	0.319	159	0.258	0.310	334
459681	3	B	7	52620	0.252	45	0.346	196	0.205	0.246	421
459679	2	B	7	66360	0.277	45	0.377	242	0.162	0.154	531
459675	1	B	19	83690	0.322	55	0.438	311	0.128	0.154	670
459676	1/0	B	19	105600	0.362	55	0.478	385	0.102	0.122	845
TBA	2/0	B	19	133100	0.406	55	0.522	476	0.081	0.097	1065
TBA	3/0	B	19	167800	0.456	55	0.572	591	0.064	0.079	1342
459683	4/0	B	19	211600	0.498	55	0.628	734	0.051	0.062	1693
459680	250	B	37	250000	0.542	65	0.694	873	0.043	0.053	2000
TBA	300	B	37	300000	0.594	65	0.730	1034	0.036	0.045	2400
TBA	350	B	37	350000	0.641	65	0.777	1197	0.031	0.038	2800
459684	400	B	37	400000	0.685	65	0.842	1362	0.027	0.033	3200
459685	500	B	37	500000	0.766	65	0.925	1685	0.022	0.032	4000
459687	600	B	61	600000	0.840	80	1.034	2042	0.018	0.025	4800
TBA	750	B	61	750000	0.968	80	1.136	2527	0.014	0.021	6000

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.

Table 2 – Colors

Cond. Size AWG or kcmil	Stranding num	Color	
		Black	Green
14	1 (solid)	459674	459659
14	7		
12	1 (solid)	459673	459658
12	7	459678	459663
10	1 (solid)	459672	459657
10	7	459677	459662
8	7	459688	459671
6	7	459686	459670
4	7	459682	459667
3	7	459681	459666
2	7	459679	459664
1	19	459675	459660
1/0	19	459676	459661
2/0	19		459665
3/0	19		
4/0	19	459683	459668
250	37	459680	
300	37		
350	37		
400	37	459684	459669
500	37	459685	
600	61	459687	
750	61		
1000	61		

