



## 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:** Class B compressed stranded tinned copper per ASTM B3 and B33
2. **Insulation:** 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 thru 1 AWG**

SOUTHWIRE SOLONONplus{TM} 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{TM} 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**

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/kcmil		No. of Strands	cmil	inch	mil		inch	lb/1000ft	Ω/1000ft	Ω/1000ft	lb
14	B	7	4110	0.070	30	BK	0.133	20	2.631	3.170	33
12	B	7	6530	0.087	30	BK	0.151	29	1.662	2.002	52
10	B	7	10380	0.113	30	BK	0.177	43	1.040	1.253	83
8	B	7	16510	0.142	45	BK	0.236	72	0.653	0.786	132
6	B	7	26240	0.178	45	BK	0.272	106	0.411	0.495	210
4	B	7	41740	0.225	45	BK	0.319	160	0.258	0.310	334
3	B	7	52620	0.252	45	BK	0.346	197	0.205	0.246	421
2	B	7	66360	0.277	45	BK	0.371	242	0.162	0.154	531
1	B	19	83690	0.322	55	BK	0.438	311	0.128	0.154	670
1/0	B	19	105600	0.362	55	BK	0.478	385	0.102	0.122	845
2/0	B	19	133100	0.406	55	BK	0.522	476	0.081	0.097	1065
3/0	B	19	167800	0.456	55	BK	0.572	591	0.064	0.079	1342
4/0	B	19	211600	0.498	55	BK	0.614	732	0.051	0.062	1693
250	B	37	250000	0.542	65	BK	0.678	871	0.043	0.053	2000
300	B	37	300000	0.594	65	BK	0.730	1034	0.036	0.045	2400
350	B	37	350000	0.641	65	BK	0.777	1197	0.031	0.038	2800
400	B	37	400000	0.685	65	BK	0.821	1359	0.027	0.033	3200
500	B	37	500000	0.766	65	BK	0.902	1681	0.022	0.032	4000
600	B	61	600000	0.840	80	BK	1.008	2038	0.018	0.025	4800
750	B	61	750000	0.968	80	BK	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.

