CU 600/1000V XLPE Insulation Thermoplastic LSZH-TP XHHW-2. CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free

Type TC-ER Power Cable 600 or 1000 Volt Three Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Thermoplastic SOLONON® Low Smoke Zero Halogen (LSZH-TP) Jacket with 1 Bare CU Ground. CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free

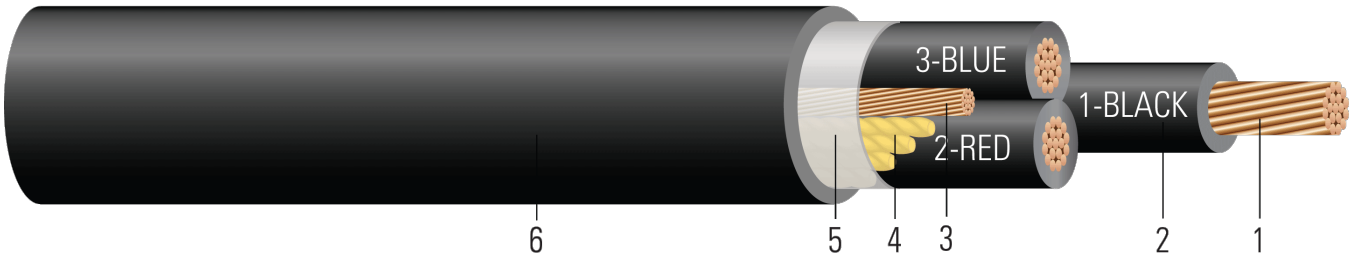


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
3. **Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8 (cable size 8 & 6 has insulated green ground)
4. **Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
5. **Binder:** Polyester flat thread binder tape for cable sizes larger than 2 AWG
6. **Overall Jacket:** Thermoplastic SOLONON® Low Smoke Zero Halogen (LSZH-TP) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 or 1000 Volt Type TC-ER power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, aerial supported by a messenger, 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. For uses in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502. Constructions with 3 or more conductors are listed for exposed runs (TC-ER) per NEC 336.10. Sunlight Resistant - For Direct Burial - Silicone Free

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1277 Electrical Power and Control Tray Cables
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-58-679 Cable Conductor Identification Method 3 (1-BLACK, 2-RED, 3-BLUE)
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems (500kcmil & Larger)

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SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE® {UL} XXX AWG CU 3/C TYPE TC-ER XHHW-2 CDRS GW 1 X X AWG CU SOLONON® 90°C JACKET SUN RES OIL RES I FOR DIRECT BURIAL 600V

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Ground	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	Jacket Color
	AWG/ Kcmil		No. of Strands	inch	mil	No. x AWG	mil	inch	lb/1000ft	lb/1000ft	
561568	8	3	7	0.142	45	1 x 10	60	0.71	187	341	BK
561567	6	3	7	0.178	45	1 x 8	60	0.805	297	482	BK
551378	2	3	7	0.283	45	1 x 6	80	1.002	703	964	BK
TBA	1	3	19	0.322	55	1 x 6	80	1.099	862	1116	BK
TBA	1/0	3	19	0.362	55	1 x 6	80	1.186	1068	1346	BK
561564	2/0	3	19	0.405	55	1 x 6	80	1.324	1327	1704	BK
565815	3/0	3	19	0.456	55	1 x 4	80	1.432	1700	2118	BK
959718	4/0	3	19	0.512	55	1 x 4	80	1.557	2110	2574	BK
TBA	250	3	37	0.558	65	1 x 4	80	1.652	2468	2905	BK
TBA	350	3	37	0.661	65	1 x 3	110	1.935	3438	4044	BK
564938	500	3	37	0.789	65	1 x 2	110	2.205	4885	5695	BK
552362	500	3	37	0.789	65	3 x 6	110	2.233	4923	5966	BK
TBA	750	3	61	0.968	80	1 x 1	110	2.662	7275	8218	BK

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 – Electrical and Engineering Data

Stock Number	Cond. Size	Cond. Number	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
	AWG/ Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
561568	8	3	2.8	396	0.653	0.81	0.052	50	55
561567	6	3	3.2	629	0.411	0.51	0.051	65	75
551378	2	3	5	1592	0.162	0.201	0.045	115	130
TBA	1	3	5.5	2008	0.128	0.159	0.046	130	145
TBA	1/0	3	5.9	2534	0.102	0.127	0.044	150	170
561564	2/0	3	6.6	3194	0.082	0.102	0.043	175	195
565815	3/0	3	7.2	4027	0.064	0.079	0.042	200	225
959718	4/0	3	7.8	5078	0.051	0.063	0.041	230	260
TBA	250	3	8.3	6000	0.043	0.053	0.041	255	290
TBA	350	3	9.7	8400	0.031	0.039	0.04	310	350
564938	500	3	13.2	12000	0.021	0.027	0.039	380	430
552362	500	3	13.4	12000	0.021	0.027	0.039	380	430
TBA	750	3	16	18000	0.014	0.019	0.038	475	535

***** Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.

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