

3/C CU 600V EPR XHHW-2 LSZH Power Cable With Ground

Type TC-ER Power Cable 600Volt Three Conductor Copper, Ethylene Propylene Rubber (EPR) insulation XHHW-2 SOLONON® Low Smoke Zero Halogen (LSZH) Jacket with 1 Bare CU Ground

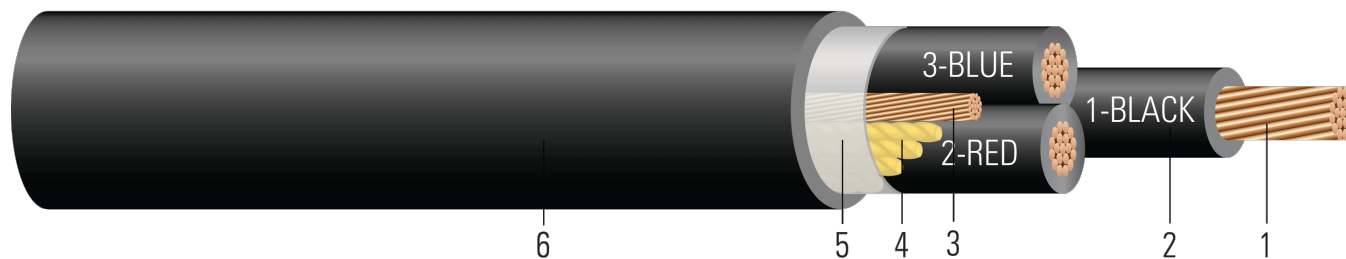


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- Insulation:** Ethylene Propylene Rubber (EPR) Type XHHW-2
- Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8 (cable size 8 & 6 has insulated green ground)
- Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
- Binder:** Polyester flat thread binder tape for cable sizes larger than 2 AWG
- Overall Jacket:** SOLONON® Low Smoke Zero Halogen (LSZH) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 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.

SPECIFICATIONS:

- ASTM B3 Standard Specification for 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 Control 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

SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE{R} MASTER-DESIGN {UL} XXX KCMIL CU 3 CDRS TYPE TC-ER XHHW-2 CDRS GW 1 X 4 AWG CU SOLONON{R} 90{D}C JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600 VOLTS



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Table 1 – Weights and Measurements

Stock Number	Cond. Size	Diameter Over Conductor	Insul. Thickness	Diameter Over Insulation	Ground	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/ Kcmil	inch	mil	inch	No. x AWG	mil	inch	lb/1000ft	lb/1000ft
566124	8	0.139	45	0.229	1 x 10	60	0.615	187	320
566127	6	0.174	45	0.264	1 x 8	60	0.691	297	460
566201	4	0.221	45	0.311	1 x 8	60	0.791	442	626
566203	2	0.277	45	0.367	1 x 6	80	0.953	703	967
566205	1	0.321	55	0.431	1 x 6	80	1.091	865	1192
566207	1/0	0.360	55	0.470	1 x 6	80	1.175	1069	1432
566210	2/0	0.404	55	0.514	1 x 6	80	1.270	1327	1731
566212	3/0	0.454	55	0.564	1 x 4	80	1.378	1700	2155
566214	4/0	0.510	55	0.620	1 x 4	80	1.499	2110	2622
566217	250	0.558	65	0.688	1 x 4	80	1.646	2469	3068
566219	350	0.661	65	0.791	1 x 3	110	1.929	3440	4271
566221	500	0.789	65	0.919	1 x 2	110	2.205	4885	5886
TBA	750	0.968	80	1.128	1 x 1	110	2.656	7278	8629

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	Shield Short Circuit Current 6 Cycles	Allowable Ampacity At 60°C†	Allowable Ampacity At 75°C†	Allowable Ampacity At 90°C†
	AWG/ Kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp	Amp
566124	8	2.5	396	0.652	0.815	0.033	3754	40	50	55
566127	6	2.8	630	0.411	0.514	0.031	5966	55	65	75
566201	4	3.2	1002	0.258	0.323	0.030	9491	70	85	95
566203	2	3.8	1593	0.162	0.203	0.028	15089	95	115	130
566205	1	5.5	2009	0.129	0.162	0.028	19029	110	130	145
566207	1/0	5.9	2534	0.102	0.128	0.028	24011	125	150	170
566210	2/0	6.4	3194	0.081	0.102	0.027	30264	145	175	195
566212	3/0	6.9	4027	0.064	0.081	0.027	38154	165	200	225
566214	4/0	7.5	5078	0.051	0.064	0.026	48114	195	230	260
566217	250	8.2	6000	0.043	0.055	0.027	56845	215	255	290
566219	350	9.6	8400	0.031	0.040	0.026	79583	260	310	350
566221	500	13.2	12000	0.022	0.029	0.025	113690	320	380	430
TBA	750	15.9	18000	0.014	0.020	0.025	170535	400	475	535

† Ampacities are based on Table 310.15 (B)(16) of the NEC, 2017 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

