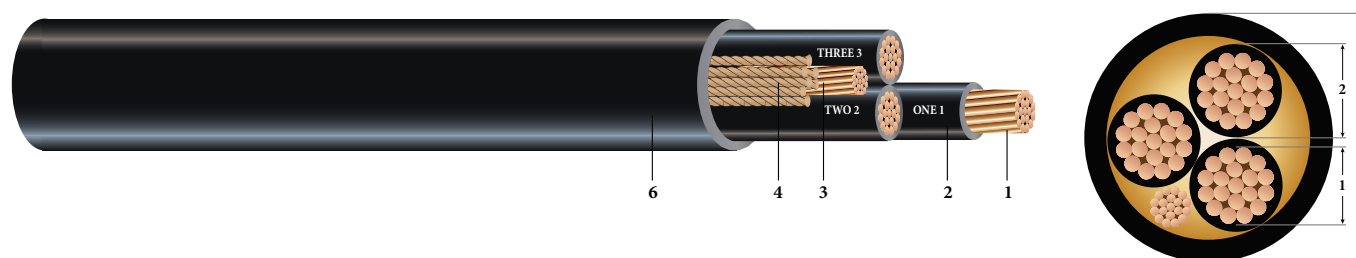


## 3/C CU 600V EPR XHHW-2 LSZH Power Cable Type TC-ER

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



Images 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 Soft or Annealed Copper
- ASTM B8 Concentric-lay-standard copper
- UL 44 Thermoset Insulated wires And cables
- UL 1277 Electrical Power And Control Cable
- UL 1685 - Flame Test
- UL 1581 - Electrical Wires, Cables and Flexible Cords
- IEEE 1202/FT4 - Vertical Tray Flame Test (70,000 Btu/hr)
- ICEA S-58-679 - Control Cable Conductor Identification Method 4
- ICEA S-95-658 NEMA WC70 - Power cables rated 2000 volts or less for the distribution of electrical energy

### SAMPLE PRINT LEGEND:

SOUTHWIRE EXXXXX #P# (UL) [#AWG Or #kcmil] CU XHHW-2 EPR/LSZH 600V Type TC-ER For CT USE SUN. RES. For DIRECT BURIAL FT4 [-25°C] YEAR (NESC) [SEQUENTIAL FEET MARKS]



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SPEC 45256\_PSS DIVISION DATE: 12/13/2017 Rev:2.0.07C

**Table 1 – Weights & Measurements**

Stock Code	Cond. Size	Dia Over Cond. (1)	Insul. Thickness	Dia Over Insul. (2)	Ground	Jacket Thickness	Approx. OD (6)	Copper Weight	Approx. Weight
	AWG	inches	inches	inches	No. x AWG	mils	inches	lbs./MFT	lbs./MFT
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
TBA	300	0.611	65	0.741	1 x 3	110	1.821	2971	3737
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	600	0.866	80	1.026	1 x 2	110	2.436	5822	7019
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

**Table 2 – Electrical and Engineering Data**

Stock Code	Cond. Size AWG	Min. Bending Radius Inches	Max. Pull Tension lbs.	Resistance		Reactance X <sub>L</sub> @ 60Hz Ω/MFT	Ø Short Circuit Current 6 Cycles Amps	Allowable Ampacities †		
				DC @ 25°C Ω/MFT	AC @ 90°C Ω/MFT			60 °C Amps	75 °C Amps	90 °C Amps
				566124	8			2.5	396	0.652
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
TBA	300	9.1	7200	0.036	0.046	0.026	68214	240	285	320
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	600	14.6	14400	0.018	0.024	0.026	136428	350	420	475
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, 2014 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

