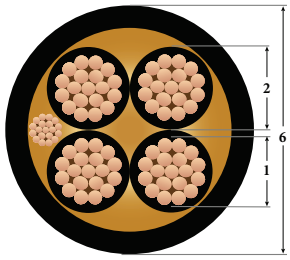
4/C CU 600V EPR XHHW-2 LSZH Power Cable Type TC-ER

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



Images 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**: Ethylene Propylene Rubber (EPR) 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**: 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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Table 1 – Weights & Measurements

Stock Code	Cond. Size AWG	Dia Over Cond. (1) inches	Insul. Thickness inches	Dia Over Insul. (2) inches	Ground No. x AWG	Jacket Thickness mils	Approx. OD (6) inches	Copper Weight lbs./MFT	Approx. Weight lbs./MFT
566126	8	0.139	45	0.229	1 x 10	60	0.673	238	395
566128	6	0.174	45	0.264	1 x 8	60	0.758	379	570
566202	4	0.221	45	0.311	1 x 8	80	0.910	572	827
566204	2	0.277	45	0.367	1 x 6	80	1.047	910	1222
566206	1	0.321	55	0.431	1 x 6	80	1.200	1126	1512
566209	1/0	0.360	55	0.470	1 x 6	80	1.295	1398	1827
566211	2/0	0.404	55	0.514	1 x 6	80	1.401	1742	2220
566213	3/0	0.454	55	0.564	1 x 4	80	1.521	2223	2761
566215	4/0	0.510	55	0.620	1 x 4	80	1.657	2770	3376
566218	250	0.558	65	0.688	1 x 4	110	1.881	3249	4071
TBA	300	0.611	65	0.741	1 x 3	110	2.009	3906	4806
566220	350	0.661	65	0.791	1 x 3	110	2.129	4531	5508
566222	500	0.789	65	0.919	1 x 2	110	2.438	6445	7619
TBA	600	0.866	80	1.026	1 x 2	110	2.697	7693	9104
TBA	750	0.968	80	1.128	1 x 1	140	3.003	9618	11386

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 DC @ 25°C Ω/MFT	Resistance AC @ 90°C Ω/MFT	Reactance X_L @ 60Hz Ω/MFT	Ø Short Circuit Current 6 Cycles Amps	Allowable Ampacities † 60 °C Amps	75 °C Amps	90 °C Amps
566126	8	2.7	528	0.652	0.815	0.036	3754	32	40	44
566128	6	3.0	840	0.411	0.514	0.034	5966	44	52	60
566202	4	3.6	1336	0.258	0.323	0.033	9491	56	68	76
566204	2	5.2	2124	0.162	0.203	0.031	15089	76	92	104
566206	1	6.0	2678	0.129	0.161	0.032	19029	88	104	116
566209	1/0	6.5	3379	0.102	0.128	0.031	24011	100	120	136
566211	2/0	7.0	4259	0.081	0.101	0.030	30264	116	140	156
566213	3/0	7.6	5370	0.064	0.080	0.030	38154	132	160	180
566215	4/0	8.3	6771	0.051	0.064	0.029	48114	156	184	208
566218	250	9.4	8000	0.043	0.054	0.030	56845	172	204	232
TBA	300	12.1	9600	0.036	0.045	0.029	68214	192	228	256
566220	350	12.8	11200	0.031	0.039	0.029	79583	208	248	280
566222	500	14.6	16000	0.022	0.027	0.028	113690	256	304	344
TBA	600	16.2	19200	0.018	0.023	0.029	136428	280	336	380
TBA	750	18.0	24000	0.014	0.019	0.028	170535	320	380	428

† 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)

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