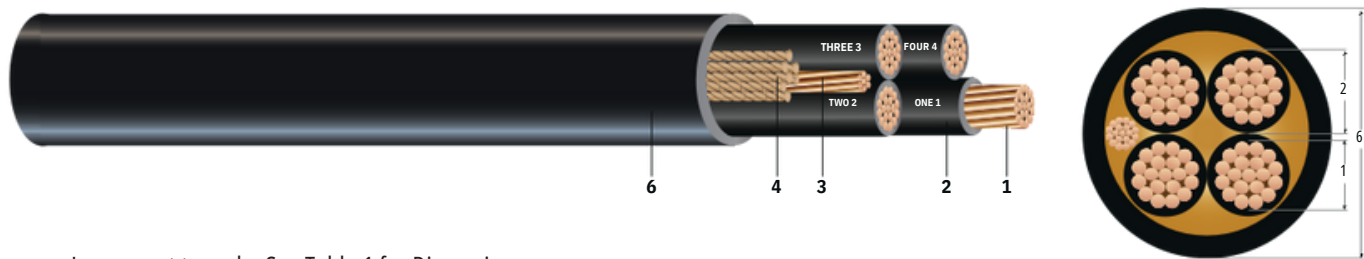


4/C CU 600V PVC THHN PVC Jacket Power Cable Type TC-ER

Type TC-ER Power Cable 600Volt Four Conductor Copper, Polyvinyl Chloride (PVC) with nylon layer insulation THHN Polyvinyl Chloride (PVC) 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:** Polyvinyl Chloride (PVC) with nylon layer Type THHN/THWN
- 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** : Polyvinyl Chloride (PVC) 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 75°C in wet locations and 90°C in 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 83 Thermoplastic 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) And ICEA T-29-520 - (210,000 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 THHN PVC/PVC 600V Type TC-ER For CT USE SUN. RES. For DIRECT BURIAL FT4 YEAR (NESC) [SEQUENTIAL FEET MARKS]

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
557694 ◇	8	0.139	35	0.209	1 x 10	60	0.625	238	369
553438 ◇	6	0.174	35	0.244	1 x 8	60	0.710	379	541
601989 ◇	4	0.221	46	0.313	1 x 8	80	0.914	572	824
601997 ◇	2	0.277	46	0.369	1 x 6	80	1.052	910	1219
602003	1	0.321	57	0.435	1 x 6	80	1.210	1126	1515
554568 ◇	1/0	0.360	57	0.474	1 x 6	80	1.304	1398	1831
556720 ◇	2/0	0.404	57	0.518	1 x 6	80	1.410	1742	2225
602029 ◇	3/0	0.454	57	0.568	1 x 4	80	1.531	2223	2766
444745 ◇	4/0	0.510	57	0.624	1 x 4	80	1.666	2770	3382
602045 ◇	250	0.558	68	0.694	1 x 4	110	1.895	3249	4077
602060 ◇	350	0.661	68	0.797	1 x 3	110	2.144	4531	5515
552513 ◇	500	0.789	68	0.925	1 x 2	110	2.453	6445	7628
604819	600	0.866	79	1.024	1 x 2	110	2.692	7693	9078
604827	750	0.968	79	1.126	1 x 1	140	2.998	9618	11342

All dimensions are nominal and subject to normal manufacturing tolerances
 ◇ Standard stock item

Table 2 – Electrical and Engineering Data

Stock Code	Cond. Size AWG	Min. Bending Radius Inches	Max. Pull Tension lbs.	Resistance		Reactance X _L @ 60Hz Ω/MFT	Ø Short Circuit Current 6 Cycles Amps	Allowable Ampacities †		
				DC @ 250C Ω/MFT	AC @ 900C Ω/MFT			60 OC Amps	75 OC Amps	90 OC Amps
				557694 ◇	8	2.5	528	0.652	0.815	0.033
553438 ◇	6	2.8	840	0.411	0.514	0.032	5966	44	52	60
601989 ◇	4	3.7	1336	0.258	0.323	0.032	9491	56	68	76
601997 ◇	2	5.3	2124	0.162	0.203	0.031	15089	76	92	104
602003	1	6.1	2678	0.129	0.161	0.031	19029	88	104	116
554568 ◇	1/0	6.5	3379	0.102	0.128	0.031	24011	100	120	136
556720 ◇	2/0	7.1	4259	0.081	0.101	0.030	30264	116	140	156
602029 ◇	3/0	7.7	5370	0.064	0.080	0.029	38154	132	160	180
444745 ◇	4/0	8.3	6771	0.051	0.064	0.029	48114	156	184	208
602045 ◇	250	9.5	8000	0.043	0.054	0.029	56845	172	204	232
602060 ◇	350	12.9	11200	0.031	0.039	0.029	79583	208	248	280
552513 ◇	500	14.7	16000	0.022	0.027	0.028	113690	256	304	344
604819	600	16.2	19200	0.018	0.023	0.028	136428	280	336	380
604827	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, 2017 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

