

# FLEXTOR™ CU 600V PVC-Nylon Insulation PVC Jacket THHN/THWN-2. CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free

Type TC-ER Power Cable Flexible 600Volt Four Conductor Copper, Polyvinyl Chloride (PVC) with nylon layer insulation THHN Polyvinyl Chloride (PVC) Jacket with 1 Green Insulated CU Ground. CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free

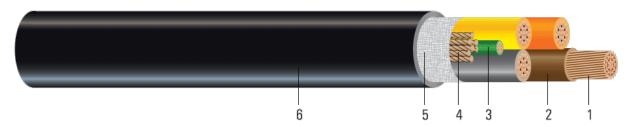


Image not to scale. See Table 1 for dimensions.

## **CONSTRUCTION:**

- 1. **Conductor:** Class C compressed stranded bare copper per ASTM B3 and ASTM B8
- 2. **Insulation**: Polyvinyl Chloride (PVC) with nylon layer Type THHN/THWN. Colors: Gray, Brown, Orange, Yellow.
- 3. **Grounding Conductor:** Green insulated THHN Class C compressed stranded bare copper per ASTM B3 and ASTM B8
- 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: Polyvinyl Chloride (PVC) Jacket

### **APPLICATIONS AND FEATURES:**

Southwire's 600 Volt Type TC-ER flexible power cables are made with class C copper stranding for extra flexibilty 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, 105°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 83 Thermoplastic Insulated Wires and Cables
- UL 1277 Electrical Power and Control Tray Cables
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-93-639 (NEMA WC 74) 5-46 KV Shielded Power Cable
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 1202 FT4 Vertical Tray Flame Test (70,000 Btu/hr) and ICEA T-29-520 (210,000 Btu/hr)

## **Table 1 – Weights and Measurements**

500	4	61	0.814	70	BN,0E,YW,GY	1 x 2	110	2.531	6436	7368	Black
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All dimensions are nominal and subject to normal manufacturing tolerances

 $\Diamond$  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

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
500	4	15.2	12800	0.022	0.029	0.039	304	344

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



<sup>\*</sup> Ampacities have been adjusted for more than Three Current-Carrying Conductors.