PantoFLEX™ DC Power Cable 2/C CU 1000V XLPE Insulation PVC Jacket. TC-ER XHHW-2 with Green Ground

Type TC-ER Control Cable 1000 Volt Copper Conductors, Cross-Linked Polyethylene Insulation XHHW-2, Polyvinyl Chloride (PVC) Jacket, Sunlight Resistant - For Direct Burial - Silicone Free

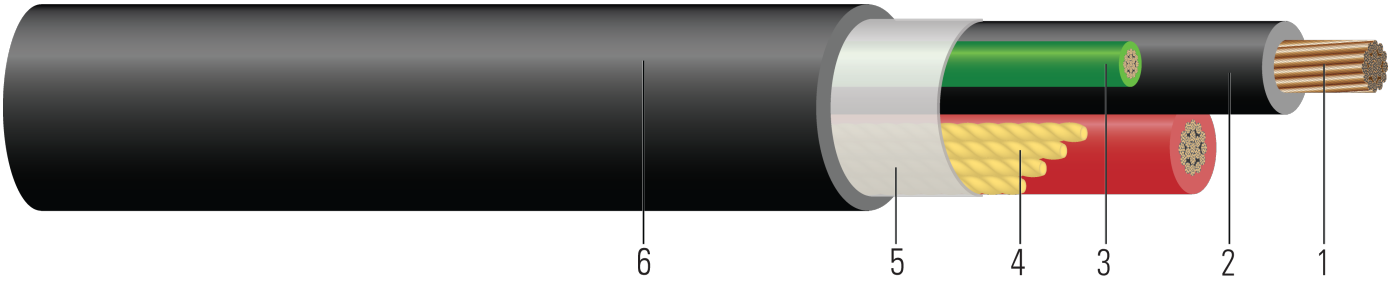

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class I, flexible stranded, bare copper per ASTM B3 and B172
2. **Insulation:** Cross-Linked Polyethylene (XLPE) Type XHHW-2
3. **Ground:** Class I, flexible stranded, bare copper per ASTM B3 and B172 with green Cross-Linked Polyethylene (XLPE) Type XHHW-2 insulation
4. **Fillers:** Wax paper fillers added as needed for a round assembly
5. **Binder:** Polypropylene tape
6. **Jacket:** Black Polyvinyl Chloride (PVC)

APPLICATIONS AND FEATURES:

Southwire's 1000 Volt Type TC-ER PantoFLEX™ DC 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. Type (TC-ER) per NEC 336.10. Silicone free.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1277 Type TC-ER Standard Power and Control Cables (1000V 14AWG and Larger)
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy

SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE{R} {UL} XXX AWG or KCMIL (XX.X{mm2}) CU 2/C TYPE TC-ER XHHW-2 CDRS GW 1 X X AWG CU GREEN INSULATED 90ºC JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600V or 1000V {NOM}-ANCE

UPDATED: Dec. 31, 2024, 11:08 p.m.UTC REVISION: 1.000.004

Table 1 – Physical and Electrical Data

Cond. Size	Cond. Number	Cond. Strands	Diameter Over Cond.	Insul. Thickness	Ground	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Rectance	Min Bending Radius	Allowable Ampacity 75°C	Allowable Ampacity 90°C	Jacket Color
AWG	No.	strands	inch	mil	No. x AWG	mil	inch	lb / 1000ft	lb / 1000ft	Ω /1000ft	Ω /1000ft	Ω/1000ft	inch	Amp	Amp	
500	2	1221	0.858	65	1 x 2	110	2.210	3260	4207	0.023	0.031	0.039	13.3	380	430	BK

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
* Ampacity based on 2023 NEC Table 310(16): Ampacities of Insulated Conductors with Not More Than Three Current-Carrying Conductors in Raceway, Cable, or Earth (Directly Buried)
* Inductive Reactance is based on non-ferrous conduit with one diameter spacing center-to-center.
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.