

TELCOFLEX® Small Cell Power Cable

600 Volt Tray Cable (TC-ER) Rated for Exposed Run. Flexible Tinned Copper Conductors. THHN, THWN Conductors rated 75°C Wet and 90°C Dry. Uninsulated, Flexible Tinned Copper Ground Wire and Drain Wire. Overall Aluminum Foil Shield and Tinned Copper Braid Shield. Overall TPE or PVC Jacket. Rated FT4 Flame Resistant, Sunlight Resistant and -40°C.

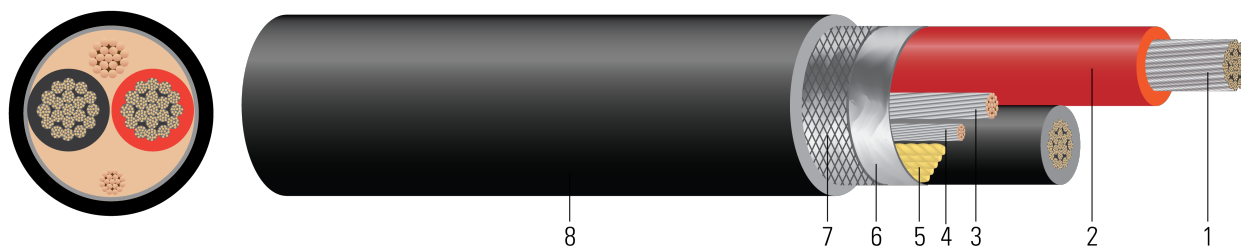


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class K Stranded Tinned Copper per ASTM B33, B172 & B174.
2. **Insulation:** Polyvinyl Chloride (PVC) Insulated Conductors with Nylon Sheath. Colors: Black, Red Color: 2 Conductor Construction - BLK, RED
3. **Ground:** Tinned Copper
4. **Drain Wire:** Tinned Copper
Phase Size: 12awg. Drain Size/Strands: 16awg/7
Phase Size: 10awg. Drain Size/Strands: 14awg/7
Phase Size: 8 awg. Drain Size/Strands: 12awg/7
5. **Filler:** Polypropylene as needed to make round
6. **Tape Shield:** Aluminum/Poly/Aluminum (3-Layer) applied Helically over cabled assembly
7. **Braid Shield:** 34 AWG Tinned Copper with 85% coverage applied over Tape Shield
8. **Overall Jacket:** Black sunlight resistant thermoplastic Elastomer (TPE) Jacket

APPLICATIONS AND FEATURES:

Southwire Tray Cable is suitable for use in industrial power or control circuits. Primary installations include cable trays, raceways and outdoor locations where supported by a messenger. These constructions are listed for exposed runs (TC-ER) per NEC 336.10. Listed for direct burial and for use in Class 1, Division 2 hazardous locations and Class 1 Control circuits. This cable may be used at temperatures not to exceed 75°C in wet locations and 90°C in dry locations.

SPECIFICATIONS:

- ASTM B3 Standard Specification for Soft or Annealed Copper Wire
- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
- ASTM B174 Standard Specification for Bunch-Stranded Copper
- 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
- UL 2882 Outline of Investigation for Radio Head Cable
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy



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SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE{R} E75755 MASTER-DESIGN {UL} X/C X AWG (XX.X{mm2}) XXX STRAND CLASS K + 1/C X AWG (X.XX{mm2}) GDING COND THHN/THWN 90{D}C DRY OR 75{D}C WET TYPE TC-ER 600V FT4 SUN RES

Table 1 – Weights and Measurements

| Stock Number | Cond. Size | Cond. Number | Cond. Strands | Diameter Over Conductor | Insul. Thickness | Diameter Over Insulation | Ground Size | Ground Strands | Jacket Thickness | Approx. OD | Approx. Weight |
|--------------|---------------|--------------|---------------|-------------------------|------------------|--------------------------|-------------|----------------|------------------|------------|----------------|
| | AWG/ Kcmil | No. | No. | inch | mil | inch | AWG | No. | mil | inch | lb/1000ft |
| TBA | 14 | 2 | 41 | 0.077 | 20 | 0.117 | 14 | 41 | 45 | 0.353 | 85 |
| TBA | 12 | 2 | 65 | 0.101 | 20 | 0.141 | 12 | 65 | 45 | 0.41 | 146 |
| 673718 | 10 | 2 | 104 | 0.126 | 25 | 0.176 | 10 | 104 | 45 | 0.48 | 212 |
| 673717 | 8 | 2 | 168 | 0.157 | 35 | 0.227 | 10 | 104 | 60 | 0.6 | 282 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

Table 2 – Electrical and Engineering Data

| Stock Number | Cond. Size | Cond. Number | DC Resistance @ 25°C | AC Resistance @ 90°C | Min Bending Radius | Allowable Ampacity At 75°C† | Allowable Ampacity At 90°C† |
|--------------|---------------|--------------|----------------------|----------------------|--------------------|-----------------------------|-----------------------------|
| | AWG/ Kcmil | No. | Ω/1000ft | Ω/1000ft | inch | Amp | Amp |
| TBA | 14 | 2 | 2.63 | 3.28 | 4 | 15 | 15 |
| TBA | 12 | 2 | 1.66 | 2.075 | 5 | 20 | 20 |
| 673718 | 10 | 2 | 1.04 | 1.300 | 6 | 30 | 30 |
| 673717 | 8 | 2 | 0.658 | 0.822 | 7 | 40 | 50 |

