

# **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.

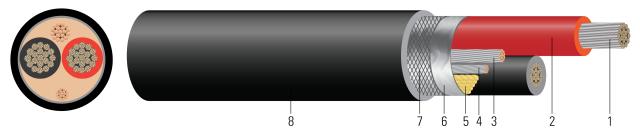


Image not to scale. See Table 1 for dimensions.

#### **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 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









## **SAMPLE PRINT LEGEND:**

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







# **Table 1 – Weights and Measurements**

| Stock<br>Number | Cond. Size    | Cond.<br>Number | Cond.<br>Strands | Diameter Over<br>Conductor | Insul.<br>Thickness | Ground       | Jacket<br>Thickness | Approx.<br>OD | Approx.<br>Weight |
|-----------------|---------------|-----------------|------------------|----------------------------|---------------------|--------------|---------------------|---------------|-------------------|
|                 | AWG/<br>Kcmil | No.             | No.              | inch                       | mil                 | No. x<br>AWG | mil                 | inch          | lb/1000ft         |
| 673717          | 8             | 2               | 168              | 0.145                      | 30                  | 1 x 10       | 60                  | 0.600         | 274               |

All dimensions are nominal and subject to normal manufacturing tolerances

## Table 2 – Electrical and Engineering Data

| Cond.<br>Size | DC Resistance @<br>25°C | AC Resistance @<br>90°C | Inductive<br>Reactance | Max Pull<br>Tension | Min Bending<br>Radius | Allowable Ampacity At<br>75°C | Allowable Ampacity At<br>90°C |
|---------------|-------------------------|-------------------------|------------------------|---------------------|-----------------------|-------------------------------|-------------------------------|
| AWG/<br>Kcmil | Ω/1000ft                | Ω/1000ft                | Ω/1000ft               | lb                  | inch                  | Amp                           | Amp                           |
| 8             | 0.679                   | 0.818                   | 0.052                  | 264                 | 2.4                   | 50                            | 55                            |

<sup>\*</sup> Inductive impedance is based on non-ferrous conduit with one diameter spacing center-to-center.





<sup>♦</sup> 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.