

## 600V Tinned Cu Cross Linked Polyethylene Pairs POS

Instrumentation Cable 600 Volt tinned Copper Conductors cross linked polyethylene Insulated Singles with Overall Shield POS. Thermoset chlorinated polyethylene CPE-TS Jacket Heat, Moisture and Sunlight Resistant. For Direct Burial-Sunlight Resistant.

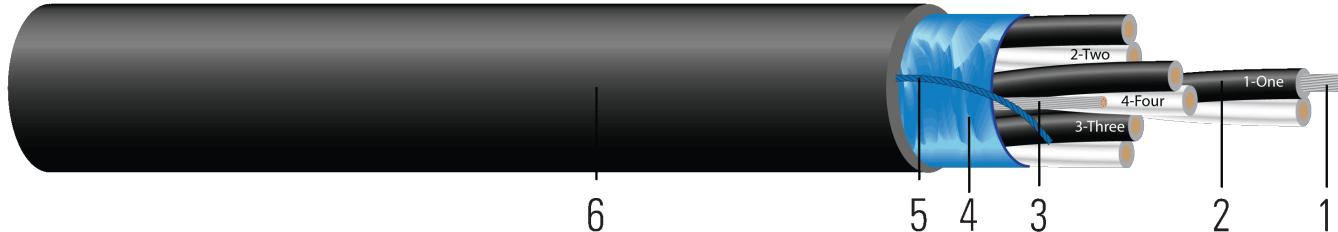


Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

- Conductor:** Class B tinned stranded copper per ASTM B33
- Insulation:** Cross linked polyethylene XLPE. Black/White alpha-numeric print alternate and inverted. 1-ONE, 2-TWO
- Overall Drain Wire:** Tinned Copper 22 AWG.
- Overall Shielded:** 100% coverage aluminum/polyester foil shield with a drain wire.
- Rip Cord:** Rip cord under jacket for ease of removal
- Jacket:** Black sunlight resistant thermoset chlorinated polyethylene CPE-TS

### APPLICATIONS AND FEATURES:

Southwire's Instrumentation Cables are suitable for installations in wet or dry locations at 90°C for operation and interconnection of protective and signaling devices and for general use in manufacturing, industrial and commercial distribution systems. Cables are constructed with 7 strand tinned copper conductors insulated with fire retardant cross linked polyethylene FR-XLPE insulation. The paired conductors are colored black, white, and alpha-numeric printed. The overall assembly is covered with an aluminum polyester foil with 100% coverage and a tinned drain wire. The cable is suited for use in cable trays, raceways, conduit, aerial (when supported with a messenger). For direct burial and sunlight resistant. The jacket is black thermoset chlorinated polyethylene CPE-TS with a nylon ripcord for easy removal.

### SPECIFICATIONS:

- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- 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} XX AWG TIN CU 1 PAIR FR-XLPE CDRS SHIELDED 90{D}C WET OR DRY CPE-TS JKT 600V SUN RES

**Table 1 – Weights and Measurements**

| Stock Number | Cond. Size | Number of Pairs | Diameter Over Conductor | Insul. Thickness | Jacket Thickness | Approx. OD | Approx. Weight | Min Bending Radius | DC Resistance @ 25°C |
|--------------|------------|-----------------|-------------------------|------------------|------------------|------------|----------------|--------------------|----------------------|
|              | AWG/ Kcmil | pair            | inch                    | mil              | mil              | inch       | lb/1000ft      | inch               | Ω/1000ft             |
| 606951       | 18         | 1               | 0.045                   | 25               | 45               | 0.289      | 40             | 2.3                | 6.669                |
| 606952       | 18         | 4               | 0.045                   | 25               | 45               | 0.459      | 79             | 3.6                | 6.669                |
| 606953       | 18         | 16              | 0.045                   | 25               | 80               | 0.886      | 299            | 7.0                | 6.669                |
| 629252       | 16         | 1               | 0.057                   | 25               | 45               | 0.316      | 50             | 2.5                | 4.181                |
| 606957       | 14         | 1               | 0.070                   | 30               | 45               | 0.379      | 76             | 3.0                | 2.631                |

All dimensions are nominal and subject to normal manufacturing tolerances

♦ Cable marked with this symbol is a standard stock item

Note: 1 Pair is not TC-ER Rated

**Table 2 – Weights and Measurements (Metric)**

| Stock Number | Cond. Size | Number of Pairs | Diameter Over Conductor | Insul. Thickness | Jacket Thickness | Approx. OD | Approx. Weight | Min Bending Radius | DC Resistance @ 25°C |
|--------------|------------|-----------------|-------------------------|------------------|------------------|------------|----------------|--------------------|----------------------|
|              | AWG/ Kcmil | pair            | inch                    | mm               | mm               | mm         | lb/km          | mm                 | Ω/km                 |
| 606951       | 18         | 1               | 0.045                   | 0.64             | 1.14             | 7.34       | 60             | 58.42              | 21.88                |
| 606952       | 18         | 4               | 0.045                   | 0.64             | 1.14             | 11.66      | 118            | 91.44              | 21.88                |
| 606953       | 18         | 16              | 0.045                   | 0.64             | 2.03             | 22.50      | 445            | 177.80             | 21.88                |
| 629252       | 16         | 1               | 0.057                   | 0.64             | 1.14             | 8.03       | 74             | 63.50              | 13.72                |
| 606957       | 14         | 1               | 0.070                   | 0.76             | 1.14             | 9.63       | 113            | 76.20              | 8.63                 |

**Typical Electrical Specifications for Each Pair**

| Size<br>AWG | Capacitance |  | Inductance<br>μH/ft |
|-------------|-------------|--|---------------------|
|             | pF/ft       |  |                     |
| 18          | 40.66       |  | 0.0957              |
| 16          | 48.51       |  | 0.0895              |