



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.

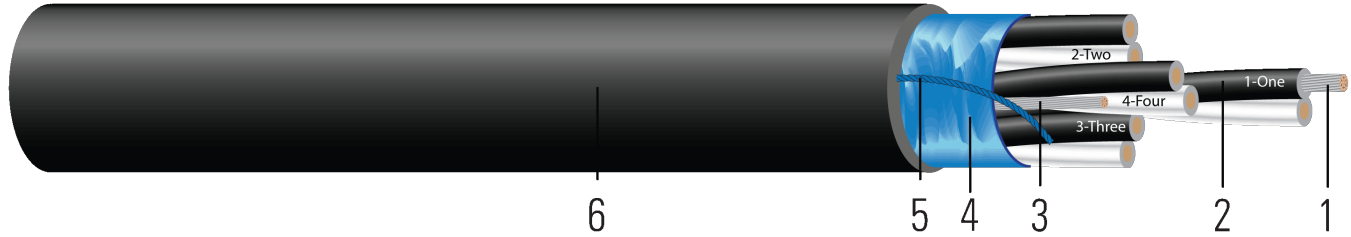


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B tinned stranded copper per ASTM B33
2. **Insulation:** Cross linked polyethylene XLPE. Black/White alpha-numeric print alternate and inverted. 1-ONE, 2-TWO
3. **Overall Drain Wire:** Tinned Copper 22 AWG.
4. **Overall Shielded:** 100% coverage aluminum/polyester foil shield with a drain wire.
5. **Rip Cord:** Rip cord under jacket for ease of removal
6. **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 | Approx. OD | Approx. Weight | Min Bending Radius | DC Resistance @ 25°C |
|--------------|---------------|-----------------|-------------------------|------------------|------------|----------------|--------------------|----------------------|
| | AWG/ Kcmil | pair | inch | mil | inch | lb/1000ft | inch | Ω/1000ft |
| 606951 | 18 | 2 | 0.045 | 25 | 0.289 | 23 | 2.30 | 6.669 |
| 606952 | 18 | 4 | 0.045 | 25 | 0.459 | 79 | 3.60 | 6.669 |
| 606953 | 18 | 16 | 0.045 | 25 | 0.886 | 299 | 7.00 | 6.669 |
| 606957 | 14 | 2 | 0.070 | 30 | 0.379 | 76 | 3.00 | 2.631 |

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

† 1 Pair is not TC-ER Rated.

! Tinned copper phase conductors

Table 2 – Weights and Measurements (Metric)

| Stock Number | Cond. Size | Number of Pairs | Diameter Over Conductor | Insul. Thickness | Approx. OD | Approx. Weight | Min Bending Radius | DC Resistance @ 25°C |
|--------------|---------------|-----------------|-------------------------|------------------|------------|----------------|--------------------|----------------------|
| | AWG/ Kcmil | pair | inch | mm | mm | lb/km | mm | Ω/km |
| 606951 | 18 | 2 | 0.045 | 0.64 | 7.34 | 34 | 58.42 | 21.88 |
| 606952 | 18 | 4 | 0.045 | 0.64 | 11.66 | 118 | 91.44 | 21.88 |
| 606953 | 18 | 16 | 0.045 | 0.64 | 22.50 | 445 | 177.80 | 21.88 |
| 606957 | 14 | 2 | 0.070 | 0.76 | 9.63 | 113 | 76.20 | 8.63 |

Typical Electrical Specifications for Each Pair

| Size | Capacitance | Inductance |
|------|-------------|------------|
| AWG | µF/ft | µH/ft |
| 18 | 40.66 | 0.0957 |
| 16 | 48.51 | 0.0895 |

