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.

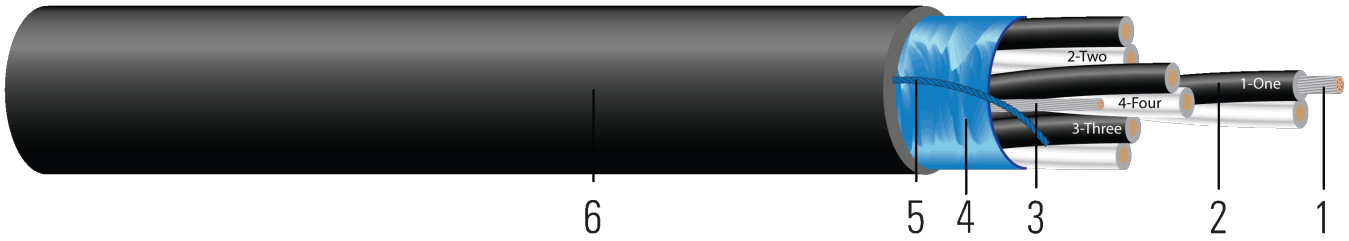

Image not to scale. See Table 1 for dimensions.

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	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	2	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	2	0.070	0.76	1.14	9.63	113	76.20	8.63

Typical Electrical Specifications for Each Pair

Size	Capacitance	Inductance
AWG	pF/ft	µH/ft
18	40.66	0.0957
16	48.51	0.0895