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## 18 AWG 4 Pairs Shielded 600V Instrumentation Tray Cable Specification

Lake Cable Part #: V184PRS

**Description:** 18 AWG, 4 pairs shielded 600V instrumentation tray cable constructed with stranded bare copper, polyvinylchloride and nylon insulation, an aluminum/mylar shield with a stranded tinned copper drain wire and an overall polyvinylchloride jacket. Individual conductors are manufactured in accordance with UL Standard 66, Type TFN/TFFN. Cable is manufactured in the USA in accordance with UL Standard 1277 and NEC listed Type TC, suitable for use in Class I Division II hazardous locations and approved for installation in cable trays per Article 336 of the National Electric Code. Cable may be installed in open air, in ducts or conduits, in trays or troughs and is approved for direct burial and outdoor applications. Jacket is sunlight and oil I resistant and cable is (UL) TC-ER approved for 600V, 75°C Wet or 90°C Dry, and meets or exceeds the requirements of UL 1581 and 1202 (FT-4) 70,000 BTU/HR and ICEA T-29-520 210,000 BTU/HR flame tests.

### 1. Conductor

- 1.1 AWG Size & Stranding: 18 AWG, Class B 7 Strands
- 1.2 Material: Annealed Bare Copper

### 2. Insulation

- 2.1 Material: Polyvinylchloride & Nylon per UL Standard 66, Type TFN/TFFN
- 2.2 Wall Thickness: 0.015" PVC & 0.005" Nylon - The minimum at any point shall not be less than 90% of the specified wall thickness

### 3. Color Code

- 3.1 Code: Black & White numbered pairs

### 4. Assembly

- 4.1 Pair/Cable Lay Length: Per UL Standard 1277
- 4.2 Pair Shield: N/A
- 4.3 Pair Drain Wire: N/A
- 4.4 Cable Binder: N/A
- 4.5 Cable Shield: Aluminum/Mylar Tape - 100% coverage
- 4.6 Cable Drain Wire: 18 AWG, 7 Strand Tinned Copper

### 5. Jacket

- 5.1 Material: Polyvinylchloride per UL Standard 1277
- 5.2 Wall Thickness: 0.045" - The minimum at any point shall not be less than 80% of the specified wall thickness
- 5.3 Diameter: 0.450"
- 5.4 Color: Black
- 5.5 Weight: 113 lbs./Mft.

### 6. Markings

- 6.1 Type: Cable shall be permanently identified via surface inkjet print
- 6.2 Legend: LAKE CABLE E208309 18AWG 4PR SHIELDED (UL) TC-ER PVC/NYLON 600V 90°C DRY  
75°C WET PVC JACKET SUN RES DIR BUR OIL RES I FT4 "ROHS"

### 7. Standards

- 7.1 UL listed as Type TC-ER per UL Standard 1277 for tray cables
- 7.2 UL approved for Direct Burial, Sunlight and Oil I Resistant applications
- 7.3 Cable meets UL 1581 & 1202 (FT-4) 70,000 BTU/HR & ICEA T-29-520 210,000 BTU/HR requirements
- 7.4 Meets ICEA S-95-658, where applicable
- 7.5 Cold Temperature Rating: -40°C
- 7.6 Suitable for Gas Resistant applications
- 7.7 All materials used in the manufacture of this cable are RoHS compliant

**ALL SPECIFIED PARAMETERS ARE NOMINAL AND SUBJECT TO VERIFICATION**