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## 16 AWG 3 Conductor Shielded 300V PLTC / ITC Cable Specification

### Lake Cable Part #: T163S

**Description:** 16 AWG, 3 conductor shielded 300V instrumentation power limited tray cable constructed with stranded bare copper, polyvinylchloride 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 13. Cable is manufactured in the USA in accordance with UL Standards 13 and 2250, listed Type PLTC or ITC, suitable for use in Class I Division II hazardous locations and approved for installation in cable trays per Article 725 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 resistant and cable is (UL) PLTC approved for 300V, 105°C and meets or exceeds the requirements of IEEE 383 and UL 1581 (1685) 70,000 BTU/HR flame tests. Operating temperature -40°C to + 105°C.

#### 1. Conductor

- 1.1 AWG Size & Stranding: 16 AWG, Class B 7 Strands
- 1.2 Material: Annealed Bare Copper

#### 2. Insulation

- 2.1 Material: Polyvinylchloride per UL Standard 13
- 2.2 Wall Thickness: 0.016" - The minimum at any point shall not be less than 90% of the specified wall thickness

#### 3. Color Code

- 3.1 Code: Black, White, Red

#### 4. Assembly

- 4.1 Lay Length: Per UL Standard 13
- 4.2 Binder: Clear Mylar Tape, as needed and/or if fillers are required
- 4.3 Shield: Aluminum/Mylar Tape - 100% coverage
- 4.4 Drain Wire: 18 AWG, 7 Strand Tinned Copper
- 4.5 Fillers: Available upon request

#### 5. Jacket

- 5.1 Material: Polyvinylchloride per UL Standard 13
- 5.2 Wall Thickness: 0.035" - The minimum at any point shall not be less than 80% of the specified wall thickness
- 5.3 Diameter: 0.273"
- 5.4 Color: Black
- 5.5 Weight: 55 lbs./Mft.
- 5.6 Recommended Bend Radius: 3.25"

#### 6. Markings

- 6.1 Type: Cable shall be permanently identified via surface inkjet print
- 6.2 Legend: LAKE CABLE E171202 16AWG 3C SHIELDED (UL) ITC 105°C OR PLTC 105°C OR CL3  
SUN RES DIR BUR FT-4 "ROHS"

#### 7. Standards

- 7.1 UL listed as Type PLTC & CL3 per UL Standard 13
- 7.2 UL listed as Type ITC per UL Standard 2250
- 7.3 UL approved for Sunlight Resistant & Direct Burial applications
- 7.4 Individual conductors pass UL VW-1 flame test
- 7.5 Cable meets IEEE 383 & UL 1581 (1685) 70,000 BTU/HR flame test requirements
- 7.6 All materials used in the manufacture of this cable are RoHS compliant

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