



529 Thomas Drive, Bensenville, IL 60106 USA - Ph: 847-238-3000 Toll Free: 888-518-8086 Fax: 630-860-5944

18 AWG 10 Conductor Shielded 300V PLTC / ITC Cable Specification

Lake Cable Part #: T1810ST

Description: 18 AWG, 10 conductor shielded 300V instrumentation power limited tray cable constructed with stranded tinned 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 70,000 BTU/HR flame tests.

1. Conductor

- 1.1 AWG Size & Stranding: 18 AWG, Class B 7 Strands
- 1.2 Material: Annealed Tinned 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, Green, Brown, Blue, Orange, Yellow, Violet, Gray

4. Assembly

- 4.1 Lay Length: 4.75" LHL Nominal
- 4.2 Binder: N/A
- 4.3 Shield: Aluminum/Mylar Tape - 100% coverage
- 4.4 Drain Wire: 20 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: 0.050" - The minimum at any point shall not be less than 80% of the specified wall thickness
- 5.3 Diameter: 0.411"
- 5.4 Color: Black
- 5.5 Weight: 116 lbs./Mft.

6. Markings

- 6.1 Type: Cable shall be permanently identified via surface inkjet print
- 6.2 Legend: LAKE CABLE E171202 18AWG 10C SHIELDED (UL) ITC OR PLTC 105°C OR CL3
SUN RES DIR BUR "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 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