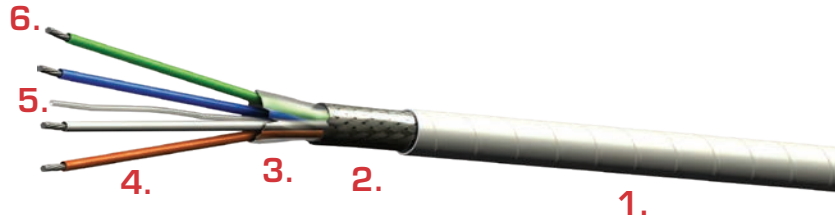


**CABLE CONSTRUCTION**

1. PTFE Tape Jacket (White) Laser Markable
2. Silver-Plated Copper Round Braid Shield
3. PTFE Tape Binder - Clear
4. Solid PFA Insulation
5. Fluoropolymer Filler
6. Silver-Plated High Strength Copper Alloy Conductors



**COLOR CODES**

- Pair #1 - White/Blue  
 Pair #2 - Orange/Green

This lightweight, low loss cable has been specially designed by PIC for airborne 100 Base-T data applications as defined by ARINC Specification 664.

Data transmission aboard aircraft faces more severe environmental and EMI situations than conventional LAN systems in commercial buildings, hence the shielding to preserve technical performance.

A PTFE tape jacket protects the cable against abrasion and environmental effects while maintaining flexibility for ease of installation and is laser markable.

E51428 exceeds Category 5e requirements, is Skydrol resistant and meets the FAA flammability requirements of 14 CFR Part FAR 25.869(a)(4) Amdt 25-113 Appendix F Part I (a)(3).

**PHYSICAL DATA**

- Conductors 28 AWG (7/36) Stranded SPCA
- Shield Coverage 80% (Braid)
- Operating Temperature -55° to +200°C
- Outer Diameter: in (mm) 0.11 (2.92)
- Minimum Bend Radius: in (mm) 0.60 (15.24)
- Weight: lbs/100 ft (kg/100 m) 1.0 (1.5)

**ELECTRICAL DATA**

- Impedance: ohms 100
- Capacitance: pF/ft (m) 14.5 (47.6)
- Velocity of Propagation: % 70.0
- Dielectric Voltage Rating (kV RMS) 1.5
- DC Resistance: ohms/1000 ft (m) Max 74.8 (245.4)
- Max Distance\*: ft (m) 170 (51)
- Attenuation: Nom / Max dB/100 ft (dB/100 m)
  - @10 MHz 3.7 / 4.1 (12.1 / 13.5)
  - @100 MHz 11.1 / 12.4 (36.4 / 40.7)

*All values nominal unless otherwise noted  
 \*Note: The max distance is based on maximum channel insertion loss per ANSI/TIA-568-C.2*