

**CABLE CONSTRUCTION**

1. ETFE Jacket (White) Laser Markable
2. Tin-Plated Copper Braided Shield
3. Foil Shield
4. Foam Fluoropolymer Outer Insulation
5. Solid PFA Inner Insulation
6. Silver-Plated High Strength Copper Alloy Conductors

**COLOR CODES**

White, Blue

This cable is a 125 ohm data bus cable approved and recommended by the Honeywell Commercial Flight Systems Group. It is an approved cable for the ASCB Data bus and Servo CAN Bus for the Primus EPIC/APEX Integrated Avionics system.

T12243 is a primary data interface for the Honeywell/Sperry SPZ-8000 DAFCS which includes EFIS, AHRS and DADC. It is also used for CAN Bus communications for the Honeywell/Sperry Primus II Radio System.

This cable is designed to simplify the termination process, pin extraction and to improve the overall quality of the installation.

Designing a cable of specified impedance requires that conductor insulation be extruded to a defined thickness, which is related to dielectric characteristics of the insulation material. For this type of 125 ohm cable, the diameter of the insulation is typically 1-1/2 times the diameter of the contact crimped to the wire. This large insulation diameter interferes with extraction procedures.

To solve this problem, PIC has employed a dual-layer insulation — an outer foamed fluoropolymer layer which can be removed so that the inner solid PFA accommodates the connector cavity for easy extraction of the contact.

T12243 cable is Skydrol resistant, RoHS compliant and passes the FAA flammability requirements of FAR Part 23 and 25, Appendix F. Test results are available upon request.



**PHYSICAL DATA**

- Conductors 24 AWG Stranded SPCA
- Dual Layer Insulation
  - Inner Layer OD: in (mm) 0.044 (1.118)
  - Outer Layer OD: in (mm) 0.075 (1.905)
- Shield Coverage 100% (Foil), 90% (Braid)
- Operating Temperature -55° to +150°C
- Outer Diameter: in (mm) 0.20 (4.95)
- Minimum Bend Radius (in.) 1.00 (25.40)
- Weight: lbs/100 ft (kg/100 m) 2.5 (3.7)

**ELECTRICAL DATA**

- Impedance: ohms 125
- Capacitance: pF/ft (m) 11.0 (36.1)
- Velocity of Propagation: % 75.0
- Dielectric Voltage Rating (kV RMS) 1.5
- DC Resistance: ohms/1000 ft (m) Max 27.5 (90.2)
- Attenuation: dB/100 ft (m) Max
  - @ 10 MHz 2.0 (6.6)
  - @ 100 MHz 6.3 (20.0)

*All values nominal unless otherwise noted*

*\*Time Trigger Protocol  
Avionic Standard Communication Bus  
Controller Area Network Bus*

*Honeywell P/N 025-05125-0001*