

CABLE CONSTRUCTION

1. ETFE Jacket (White) Laser Markable
2. Silver Plated Copper Round Braid Shield
3. Overall Foil Shield
4. ETFE Jackets (White)
5. Silver-Plated Copper Round Braid Shields
6. Foam Fluoropolymer Insulation
7. Silver-Plated High Strength Copper Alloy Conductors

COLOR CODES

- Pair #1 - White/Blue
 Pair #2 - Yellow/Green
 Pair #3 - Red/Black
 Pair #4 - Orange/Brown

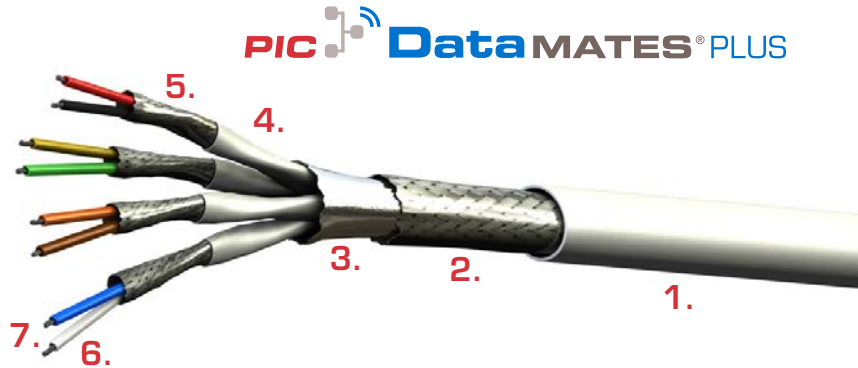
This cable has been specially designed by PIC for airborne high-speed data applications. The twisted-pair construction (four separate pairs) effectively reduces inductive interference while 100% foil (for each pair) plus braided shielding over each pair and an overall shield serves to further protect against EMI.

DV0824 cable has 4 pairs which were designed to have a low skew between pairs for high performance video applications. The low skew between each pair ensures the signal sent down each pair reaches the other end at approximately the same time.

Conductor insulation consists of foamed fluoropolymer, having a higher velocity of propagation. This assures correct impedance matching, thus minimizing reflection — important in high-speed data applications. This permits smaller overall diameter and weight, at the same time retaining performance and required operating parameters. Each pair is individually shielded and jacketed to isolate it from the other pairs.

Silver-plated copper conductors and shielding assure uniform conductivity with excellent solderability. An ETFE jacket protects the cable against abrasion and environmental effects while maintaining flexibility for ease of installation.

It 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.



PIC  **DataMATES® PLUS**

PHYSICAL DATA

- Conductors 24 AWG Stranded SPC
- Shield Coverage 100% (Foil), 80% (Braid), 95% (Overall)
- Operating Temperature -55° to +200°C
- Outer Diameter: in (mm) 0.35 (8.89)
- Minimum Bend Radius: in (mm) 2.00 (50.80)
- Weight: lbs/100 ft (kg/100 m) 7.7 (11.5)

ELECTRICAL DATA (each pair)

- Impedance: ohms 100
- Capacitance: pF/ft (m) 13.0 (42.7)
- Velocity of Propagation: % 80.0
- Dielectric Voltage Rating (kV RMS) 1.5
- DC Resistance: ohms/1000 ft (m) Max 28.5 (93.5)
- Skew (Inter-pair) pS/ft 14.0 (45.3)
- Attenuation: Nom / Max dB/100 ft (dB/100 m)
 - @10 MHz 2.4 / 2.7 (7.9 / 8.9)
 - @100 MHz 8.2 / 8.8 (26.9 / 28.9)

All values nominal unless otherwise noted