E5E1724

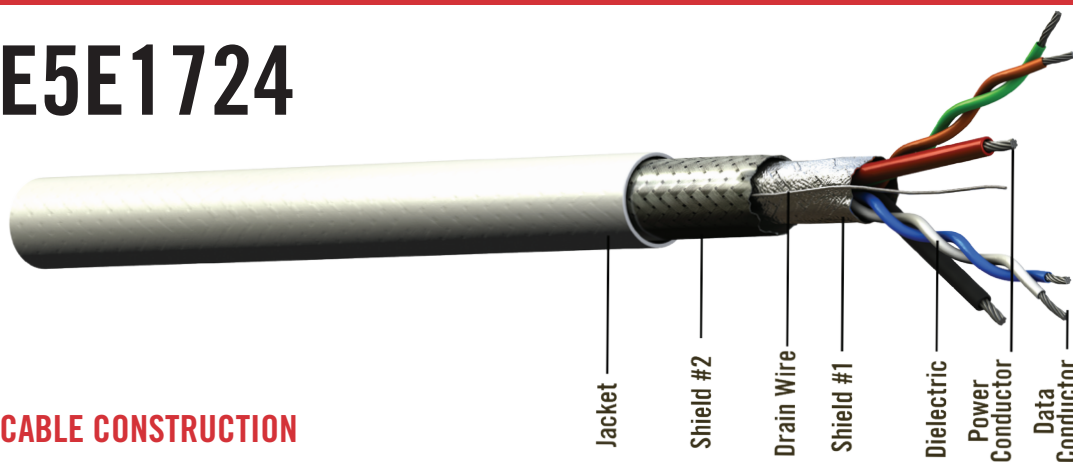Labels: Jacket | Shield #2 | Drain Wire | Shield #1 | Dielectric | Power Conductor | Data Conductor

CABLE CONSTRUCTION

Data Conductor: Tin-Plated Copper
Power Conductor: Tin-Plated Copper
Dielectric: FEP
Shield 1: Aluminum/Polyimide Foil

Drain Wire: Tin-Plated Copper
Shield #2: Tin-Plated Copper Braid
Jacket: ETFE, White (Laser Markable)

COLOR CODES

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

Power Pair: Red, Black

The E5E1724 is a CAT5e Power over Ethernet (PoE) cable specially designed for airborne applications as defined by ARINC Specification 664. The E5E1724 data pairs are manufactured using a high-temp fluoropolymer and will perform at frequencies from CAT 5e, up to CAT 6a requirements. The E5E1724's twisted-pair construction (two separate pairs) of tin-plated copper conductors is surrounded by FEP insulation and 100% foil and 85% braided shielding assure uniform conductivity with excellent solderability, further protecting against EMI. An ETFE laser markable jacket protects the cable against abrasion and environmental effects while maintaining flexibility for ease of installation.

PHYSICAL DATA

Conductors:

Data:	24 AWG Stranded TPC
Power:	22 AWG Stranded TPC

Shield Coverage: 100% (Foil), 85% (Braid)
Temperature Range: -55 to +150°C
Outer Diameter: in (mm) 0.208 (5.28)
Minimum Bend Radius: in (mm) 1.0 (25.4)
Weight: lbs/100 ft (kg/100 m) 3.56 (5.3)

ELECTRICAL DATA

Impedance: 100 ohms
Capacitance: pF/ft (m) 13 (42.7)
Velocity of Propagation: 80%
Dielectric Voltage Rating: (kV, RMS) 0.9
DC Resistance: ohms/1000 ft (m)

Data Pair:	26.2 (86.0)
Power Pair:	16.2 (53.1)

Max Distance: ft (m) 257 (78)

ENVIRONMENTAL DATA

Skydrol Resistant: SAE AS4373E, Method 601
RoHS Compliant: RoHS Directive 2002/95/EC)
Flame / Smoke Requirements: FAR Part 25.869 (a) App. F, Part 1, (a)(3)
Berry Specialty Metals Compliance: Complies with DFARS 252.225-7014, Alt 1

ATTENUATION DATA

Frequency	Nom / Max dB/100 ft	Nom / Max (dB/100 m)
@10 MHz	2.3 / 2.7	(7.5 / 8.9)
@100 MHz	6.8 / 7.5	(22.3 / 24.6)

All values nominal, unless otherwise noted