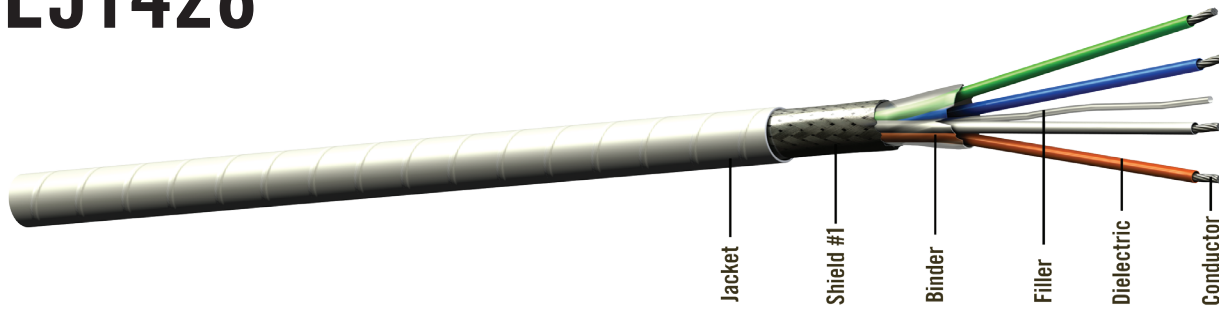


E51428



CABLE CONSTRUCTION

Conductors: Silver-Plated High Strength Copper Alloy
Dielectric: PFA
Binder: PTFE Tape
Filler: Fluoropolymer

Shield #1: Silver-Plated Copper Round Braid
Jacket: PTFE, White (Laser Markable)

COLOR CODES

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

The E51428 is a 100 Base-T Quadrax cable specially designed for airborne applications as defined by ARINC Specification 664. The overall design of E51428 allows a smaller overall diameter and weight while exceeding Category 5e requirements. The E51428's construction of silver-plated high-strength copper alloy conductors is surrounded by a solid PFA insulation assuring uniform conductivity with excellent solderability.

The 80% braided shielding provides shielding to preserve technical performance. A PTFE laser-markable jacket protects the cable against abrasion and environmental effects while maintaining flexibility for ease of installation.

PHYSICAL DATA

Conductor: 28 AWG Stranded SPHSCA
Shield Coverage: 80% (Braid)
Temperature Range: -55 to +200°C
Outer Diameter: in (mm) 0.115 (2.92)
Minimum Bend Radius: in (mm) 0.6 (15.24)
Weight: lbs/100 ft (kg/100 m) 1.0 (1.5)

ELECTRICAL DATA

Impedance: 100 ohms
Capacitance: pF/ft (m) 14.5 (47.6)
Velocity of Propagation: 70%
Dielectric Voltage Rating: (kV, RMS) 1.5
DC Resistance: ohms/1000 ft (m) 74.8 (245.4)
Max Distance: ft (m) 170 (52)

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	3.7/4.1	(12.1/13.5)
@100 MHz	11.1/12.4	(36.4/40.7)

All values nominal, unless otherwise noted

E51428 CAT 5E ETHERNET CABLE

