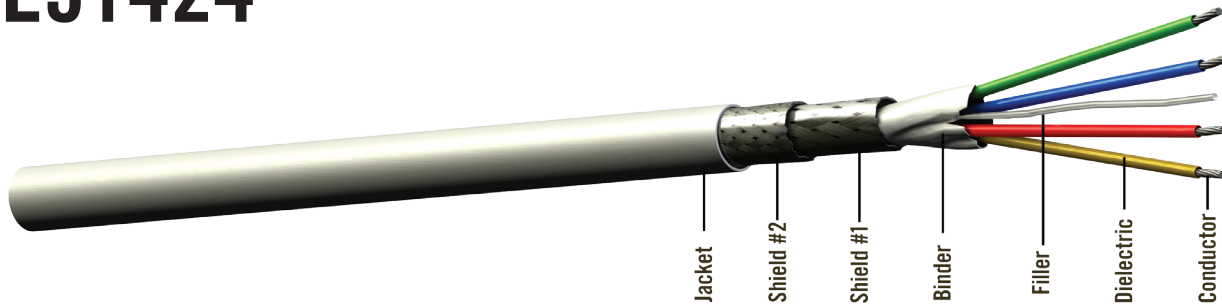


E51424



CABLE CONSTRUCTION

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

Shield #1: Tin-Plated Copper Inner Flat Strip Braid
Shield #2: Tin-Plated Copper Round Braid
Jacket: ETFE, White (Laser Markable)

COLOR CODES

Pair #1: Red/Blue
Pair #2: Yellow/Green

The E51424 is a 100 Base-T Quadrax cable specially designed for airborne applications as defined by ARINC Specification 664. The overall design of E51424 allows a smaller overall diameter and weight while exceeding Category 5e requirements. The E51424's construction of silver-plated copper conductors is surrounded by fluoropolymer dielectric that assures uniform conductivity with excellent solderability. E51424 is designed to be terminated with ARINC 600 and D38999 quad-type contacts and is compatible with any contact designed for Tensolite cable part number NF24Q100-01.

The 90% inner braid and 85% outer braided shielding provides double shielding to preserve technical performance. An ETFE laser-markable jacket protects the cable against abrasion and environmental effects while maintaining flexibility for ease of

PHYSICAL DATA

Conductor: 24 AWG Stranded SPHSCA
Shield Coverage: 90% Inner (Braid),
85% Outer (Braid)
Temperature Range: -55 to +150°C
Outer Diameter: in (mm) 0.161 (4.09)
Minimum Bend Radius: in (mm) 0.8 (20.32)
Weight: lbs/100 ft (kg/100 m) 2.2 (3.3)

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) 28.5 (93.5)
Max Distance: ft (m) 255 (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	8.0/9.2	(26.2/30.2)

All values nominal, unless otherwise noted

E51424 CAT 5E ETHERNET CABLE

CONTACTS/CONNECTORS FOR PART # E51424

PART #	CONTACT TYPE	TOOL PART #
110506	Shielded CAT 5e/CAT6, Plug w/ATUM Strain Relief	110288 - RJ45 Crimp Tool
110558	Shielded CAT 5e/CAT 6, Plug w/ATUM Strain Relief	110288 - RJ45 Crimp Tool
110726	Shielded CAT 5e/CAT 6, Plug w/Protective Boot	110288 - RJ45 Crimp Tool
110789	Shielded CAT 6, Plug w/ATUM Strain Relief (fits Amphenol® (RJF)ruggedized backshell)	110288 - RJ45 Crimp Tool
110939	Shielded CAT 6a, Jack w/ATUM Strain Relief	110701 - Soft Jaw Clamping Pliers