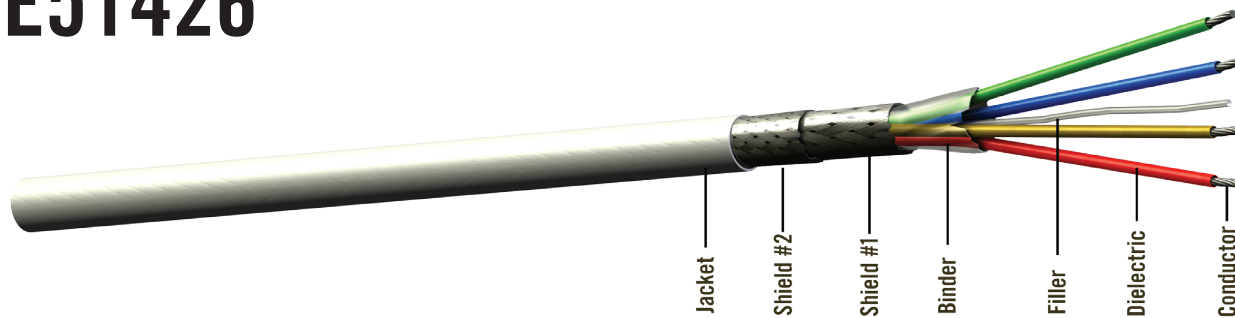


# E51426



## 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 E51426 is a 100 Base-T Quadrx cable specially designed for airborne applications as defined by ARINC Specification 664. The overall design of E51426 allows a smaller overall diameter and weight while exceeding Category 5e requirements. The E51426's construction of high-strength copper alloy conductors is surrounded by fluoropolymer insulation assuring uniform conductivity with excellent solderability. E51426 is designed to be terminated with ARINC 600 and D38999 quadrx contacts and is compatible with any contact designed for Tensolite cable part number NF26Q100. The 90% inner braid and 85% outer braided shielding provide 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 installation.

## PHYSICAL DATA

**Conductor:** 26 AWG Stranded SPHSCA  
**Shield Coverage:** 90% Inner (Braid),  
85% Outer (Braid)  
**Temperature Range:** -55 to +150°C  
**Outer Diameter:** in (mm) 0.137 (3.48)  
**Minimum Bend Radius:** in (mm) 0.7 (17.78)  
**Weight:** lbs/100 ft (kg/100 m) 1.8 (2.7)

## 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) 44.8 (147)  
**Max Distance:** ft (m) 214 (65)

## 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	2.8/3.2	(9.2/10.5)
@100 MHz	9.6/11.0	(31.5/36.1)

*All values nominal, unless otherwise noted*

**E51426 CAT 5E ETHERNET CABLE**

# CONTACTS/CONNECTORS FOR PART # E51426

PART #	CONTACT TYPE	TOOL PART #
110731	Shielded CAT 6a, Plug w/ATUM Strain Relief	110729 - RJ45 Crimp Tool
110725	Shielded CAT 6a, Plug w/Protective Boot	110729 - RJ45 Crimp Tool
110790	Shielded CAT 6, Plug w/ATUM Strain Relief (fits Amphenol® (RJF)ruggedized backshell)	110729 - RJ45 Crimp Tool
110939	Shielded CAT 6a, Jack w/ATUM Strain Relief	110701 - Soft Jaw Clamping Pliers