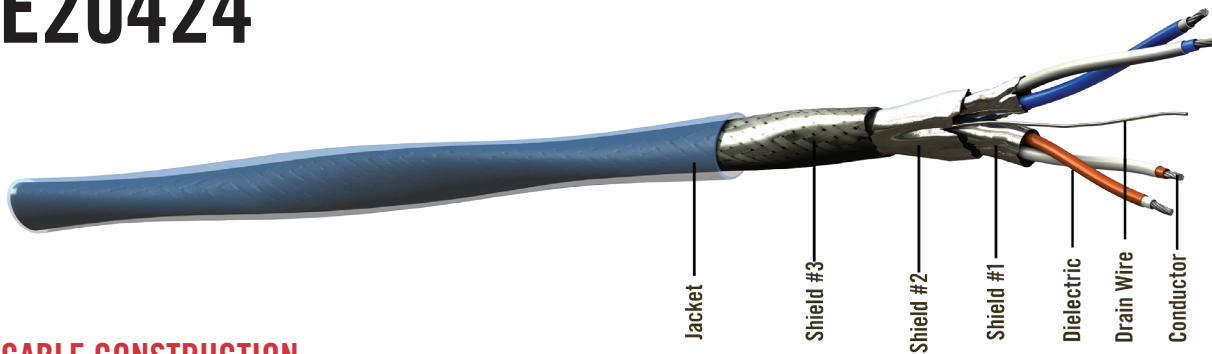


E20424



CABLE CONSTRUCTION

Conductors: Silver-Plated Copper

Dielectric: Dual Layer FEP

Shield #1: Aluminum/Polyester Foil (each pair)

Drain Wire: Tin-Plated Copper

Shield #2: Aluminum/Polyester

Shield #3: Silver-Plated Copper Braid

Jacket: FEP, Translucent Blue

COLOR CODES

Pair #1: White w/Blue Inner, Blue w/White Inner

Pair #2: Orange w/White Inner, White w/Orange Inner

The E20424 is a 2 pair, 10/100 Base-T CAT5e cable specially designed for airborne applications as defined by ARINC Specification 664. The overall design of E20424 allows a smaller overall diameter and weight while retaining performance and required operating parameters. The E20424's twisted-pair construction (two separate pairs) of silver-plated copper conductors is surrounded by dual-layer foamed/solid fluoropolymer dielectric that assures uniform conductivity with excellent solderability. Removal of the outer foamed layer reveals the inner solid insulation of a diameter compatible with conventional RJ45 connector terminations.

The 100% foil (for each pair, as well as the entire cable) and 90% braided shielding assure uniform conductivity with excellent solderability, further protecting against EMI*. An FEP jacket protects the cable against abrasion and environmental effects while maintaining flexibility for ease of installation.

*The individual pair foil shields are also isolated from the overall foil shield for additional protection.

PHYSICAL DATA

| | |
|--------------------------------------|--------------------------|
| Conductor: | 24 AWG Stranded SPC |
| Shield Coverage: | 100% (Foil), 90% (Braid) |
| Temperature Range: | -55 to +200°C |
| Outer Diameter: in (mm) | 0.265 (6.73) |
| Minimum Bend Radius: in (mm) | 1.3 (33.02) |
| Weight: lbs/100 ft (kg/100 m) | 4.18 (6.2) |

ELECTRICAL DATA

| | |
|---|-------------|
| Impedance: | 100 ohms |
| Capacitance: pF/ft (m) | 13.4 (44) |
| Velocity of Propagation: | 76% |
| Dielectric Voltage Rating: (kV, RMS) | 1.5 |
| DC Resistance: ohms/1000 ft (m) | 28.5 (93.5) |
| Max Distance*: ft (m) | 296 (90) |

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 | 2.2/2.4 | (7.2/7.9) |
| @100 MHz | 7.6/8.0 | (24.9/26.2) |

All values nominal, unless otherwise noted

**E20424
CAT 5E ETHERNET CABLE**

CONTACTS/CONNECTORS FOR PART # E20424

| PART # | CONTACT TYPE | TOOL PART # |
|--------|---|-----------------------------------|
| 110787 | Shielded CAT 6, Plug w/ATUM Strain Relief | 110288 - RJ45 Crimp Tool |
| 110303 | Shielded CAT 6, Plug w/Strain Relief Sleeve | 110288 - RJ45 Crimp Tool |
| 110339 | Shielded CAT 6, Plug w/Protective Boot | 110288 - RJ45 Crimp Tool |
| 110361 | Shielded CAT 6 Plug w/ATUM Strain Relief (fits Amphenol® (RJF) ruggedized backshell) | 110288 - RJ45 Crimp Tool |
| 110912 | Shielded CAT 6a, 90° Plug w/ATUM Strain Relief (568A) | 110701 - Soft Jaw Clamping Pliers |
| 110900 | Shielded CAT 6a, 90° Plug w/ATUM Strain Relief (568B) | 110701 - Soft Jaw Clamping Pliers |
| 110973 | Shielded CAT 6a, Plug w/Clamp Nut Strain Relief (568A) | 110701 - Soft Jaw Clamping Pliers |
| 110975 | Shielded CAT 6a, Plug w/Clamp Nut Strain Relief (568B) | 110701 - Soft Jaw Clamping Pliers |
| 110937 | Shielded CAT 6a, Jack w/ATUM Strain Relief (568A) | 110701 - Soft Jaw Clamping Pliers |
| 110938 | Shielded CAT 6a, Jack w/ATUM Strain Relief (568B) | 110701 - Soft Jaw Clamping Pliers |
| 110384 | Shielded CAT 6, Plug, Blade Patch | N/A |