

**SPECIFICATION CONTROL DRAWING**

**7724A1424**

**CHEMINAX**

77 OHM, AWG 24, 19 STRANDS OF AWG 36,  
OPTIMIZED SHIELD, DATA BUS CABLE

Date: 8-8-18  
Revision: B

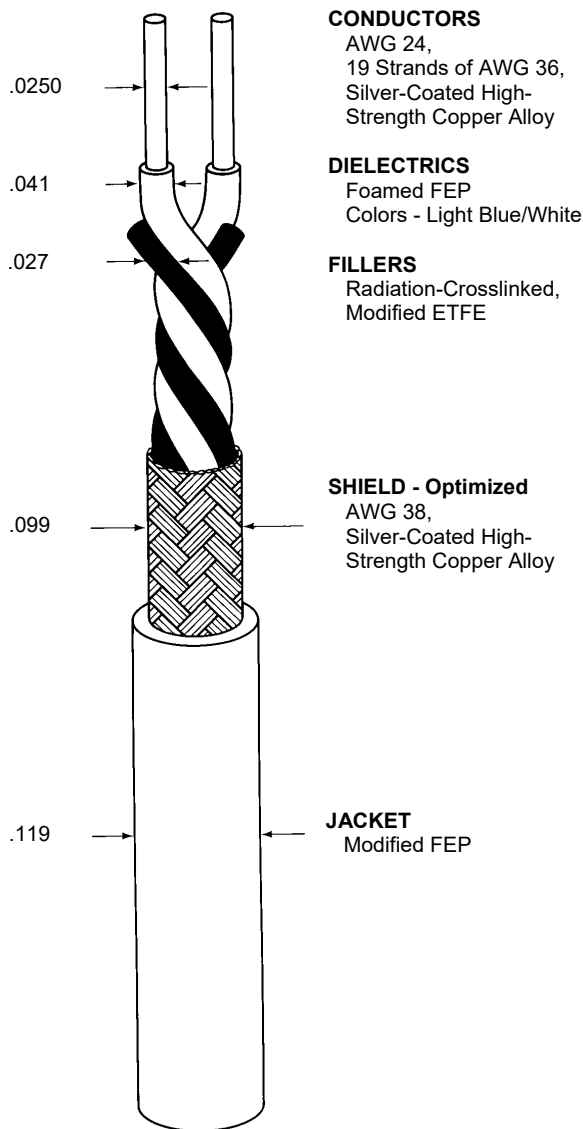
THIS SPECIFICATION SHEET FORMS A PART OF THE LATEST ISSUE OF RAYCHEM SPECIFICATION 1200.

**CONSTRUCTION DETAILS**

**ELECTRICAL CHARACTERISTICS**

DIMENSIONS ARE NOMINAL VALUES IN INCHES, UNLESS OTHERWISE DESIGNATED.

CHARACTERISTIC IMPEDANCE	77 ± 5 ohms, Method C at 1 MHz
MUTUAL CAPACITANCE	18 pF/ft. (nominal)
VELOCITY OF PROPAGATION	76% (nominal)
ATTENUATION	1.4 dB/100 ft. (maximum) at 1 MHz
SURFACE TRANSFER IMPEDANCE	TBD



**CONDUCTORS**  
AWG 24,  
19 Strands of AWG 36,  
Silver-Coated High-  
Strength Copper Alloy

**DIELECTRICS**  
Foamed FEP  
Colors - Light Blue/White

**FILLERS**  
Radiation-Crosslinked,  
Modified ETFE

**SHIELD - Optimized**  
AWG 38,  
Silver-Coated High-  
Strength Copper Alloy

**JACKET**  
Modified FEP

**ADDITIONAL REQUIREMENTS**

**ELECTRICAL**

CONDUCTOR RESISTANCE (prior to cabling)	26.5 ohms/1000 ft. (nominal)
INSULATION RESISTANCE	10,000 megohms (minimum) for 1000 ft.
JACKET FLAWS	
SPARK TEST	1.0 kV (rms)
IMPULSE TEST	6.0 kV (peak)
VOLTAGE WITHSTAND (DIELECTRIC)	1000 volts (rms) (minimum)

**ENVIRONMENTAL**

FLAMMABILITY	Method B
HEAT SHOCK	225°C
LOW TEMPERATURE-COLD BEND	-55°C/3.25 inch mandrel
UV LASER MARKING (per SAE AS4373, Method 1001)	For 7724A1424-9LM only:
SOLID LASER	67% (minimum)
DOT MATRIX LASER	60% (minimum)
VOLTAGE WITHSTAND (Post Environmental)	1000 volts (rms), 1 minute

**PHYSICAL**

CABLE LAY LENGTH	.75 inch (minimum), 1.25 inches (maximum)
INSULATION (DIELECTRIC) (prior to cabling)	
ELONGATION	50% (minimum)
TENSILE STRENGTH	600 lbf/in <sup>2</sup> (minimum)
JACKET	
ELONGATION	200% (minimum)
TENSILE STRENGTH	2000 lbf/in <sup>2</sup> (minimum)
JACKET THICKNESS	.010 inch (nominal)

WEIGHT	13.6 lbs/1000 ft. (nominal)
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**ENGINEERING REFERENCE**

TEMPERATURE RATING	200°C (maximum)
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Designate outer jacket color with a dash number in accordance with MIL-STD-681. Unless otherwise specified, outer jacket color will be translucent white designated by a "-9X" appended to the part number, e.g. 7724A1424-9X.

A white laser markable outer jacket will be designated by a "-9LM" appended to the part number, e.g. 7724A1424-9LM.

Other codes and suffixes may be added to the part number, as necessary, to capture any additional requirements imposed by the purchase order.

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice. TE Connectivity also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

