

**SPECIFICATION CONTROL DRAWING**

**0024S1614**

**CHEMINAX**

100 OHM, AWG 24, 19 STRANDS OF AWG 36,  
TWINAXIAL CABLE, OUTER SPACE USE

Date

8-29-07

Revision

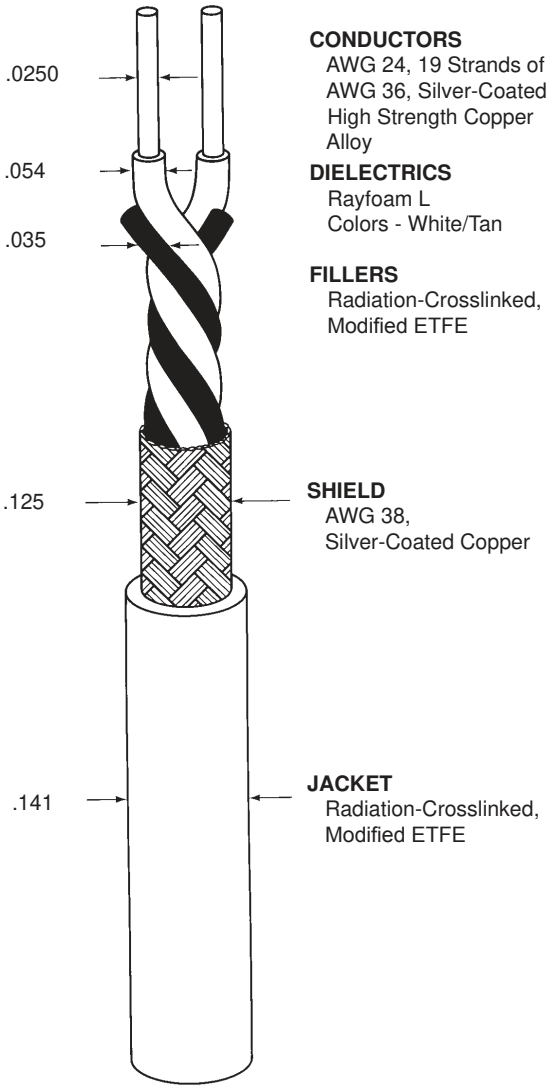
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THIS SPECIFICATION SHEET FORMS A PART OF THE LATEST ISSUE OF RAYCHEM SPECIFICATION 1200.

**CONSTRUCTION DETAILS**

**ELECTRICAL CHARACTERISTICS**

DIMENSIONS ARE NOMINAL VALUES IN INCHES UNLESS OTHERWISE DESIGNATED.



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

**DIELECTRICS**  
Rayfoam L  
Colors - White/Tan

**FILLERS**  
Radiation-Crosslinked,  
Modified ETFE

**SHIELD**  
AWG 38,  
Silver-Coated Copper

**JACKET**  
Radiation-Crosslinked,  
Modified ETFE

CHARACTERISTIC IMPEDANCE	100 ± 7 ohms, Method C at 1 MHz
MUTUAL CAPACITANCE	13.5 pF/ft. (nominal)
VELOCITY OF PROPAGATION	76% (nominal)

**ADDITIONAL REQUIREMENTS**

**ELECTRICAL**

CONDUCTOR RESISTANCE	26.5 ohms/1000 ft. (nominal)
INSULATION RESISTANCE	10,000 megohms (minimum) for 1000 ft.
JACKET FLAWS SPARK TEST IMPULSE TEST	1.0 kV (rms) 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/4.00 inch mandrel
VOLTAGE WITHSTAND (Post Environmental)	1000 volts (rms), 1 minute

**PHYSICAL**

INSULATION (DIELECTRIC) (Prior to Cabling)	
ELONGATION	50% (minimum)
TENSILE STRENGTH	1000 lbf/in <sup>2</sup> (minimum)
JACKET ELONGATION	50% (minimum)
TENSILE STRENGTH	5000 lbf/in <sup>2</sup> (minimum)
JACKET THICKNESS	.008 inch (nominal)
SHIELD COVERAGE	90% (minimum)
WEIGHT	14.6 lbs/1000 ft. (nominal)

**OUTER SPACE REQUIREMENTS**

RADIATION RESISTANCE	500 megarads/4.25 inch mandrel
VACUUM STABILITY TOTAL MASS LOSS (TML) VOLATILE CONDENSABLE MATERIAL (VCM)	1.00% (maximum) 0.10% (maximum)

Outer jacket color will be white (designated by a "-9" appended to the part number, e.g. 0024S1614-9) unless otherwise specified.

Designate outer jacket color with a dash number in accordance with MIL-STD-681. 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. Tyco Electronics also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

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THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.