## SPECIFICATION CONTROL DRAWING

0024F4424 5-1-13 Date С Revision

**CHEMINAX** 

.0235

.053

.036

.113

.130

.146

(nominal)

.155

(maximum)

100 OHM, AWG 24, 19 STRANDS OF AWG 36, TWINAXIAL CABLE

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  $100 \pm 10$  ohms, Method D, 1 to 100 MHz **MUTUAL CAPACITANCE** 13.4 pF/ft. (nominal)

AWG 24, 19 Strands of AWG 36, Silver-Coated

**VELOCITY OF PROPAGATION** 78% (nominal)

High-Strength Copper Alloy

**CONDUCTORS** 

ADDITIONAL REQUIREMENTS

**DIELECTRICS** Ravfoam H

**FEP** 

1st SHIELD

2<sup>nd</sup> SHIELD

**JACKET** 

Modified FEP

AWG 38

CONDUCTOR RESISTANCE

**INSULATION RESISTANCE** 

28.1 ohms/1000 ft. (maximum)

Colors - Light Blue/White **FILLERS** 

Flat, .0015 strand thickness

Tin-Coated Copper

Tin-Coated Copper

(prior to cabling)

10,000 megohms (minimum) for 1000 ft.

JACKET FLAWS

SPARK TEST 1.0 kV (rms) 6.0 kV (peak)

VOLTAGE WITHSTAND (DIELECTRIC) 1500 volts (rms) (minimum)

**ELECTRICAL** 

**IMPULSE TEST** 

**ENVIRONMENTAL** 

**FLAMMABILITY** Method B **HEAT SHOCK** 225°C

LOW TEMPERATURE-COLD BEND -55°C/4.00 inch mandrel **VOLTAGE WITHSTAND** 1000 volts (rms), 1 minute

(Post Environmental)

**PHYSICAL** 

INSULATION (DIELECTRIC)

(Prior to Cabling)

**ELONGATION** 50% (minimum) TENSILE STRENGTH 600 lbf/in2 (minimum)

**JACKET** 

**ELONGATION** 200% (minimum) TENSILE STRENGTH 2000 lbf/in2 (minimum) JACKET THICKNESS .008 inch (nominal)

SHIELD COVERAGE 92% (minimum) (1st shield) 85% (minimum) (2<sup>nd</sup> shield)

Outer jacket color will be translucent blue (designated by a "-6X" appended to the part number, e.g. 0024F4424-6X) 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.

WEIGHT

21.3 lbs/1000 ft. (maximum)

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice. Tyco Electronics Corporation 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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**CHEMINAX** 

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TABLE I. ELECTRICAL PARAMETERS		
FREQUENCY (MHz)	INSERTION LOSS dB/100m (maximum)	RETURN LOSS dB/100m (minimum)
1.0	2.7	20.0
4.0	5.6	23.0
8.0	7.9	24.5
10.0	8.9	25.0
16.0	11.2	25.0
20.0	12.7	25.0
25.0	14.2	24.2
31.25	16.0	23.3
62.5	23.3	20.7
100.0	30.1	19.0

Note: Values are for reference only. Actual values shall be determined utilizing the formulas in ANSI/TIA-568-C.2.