## SPECIFICATION CONTROL DRAWING

**CHEMINAX** 

120 OHM, AWG 24, 19 STRANDS OF AWG 36. TWINAXIAL CABLE

Date:

В Revision:

2024V8424

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

#### CONSTRUCTION DETAILS

# **ELECTRICAL CHARACTERISTICS**

.0235

.054

036

.116

.123

.140

.156

(nominal)

.170 (maximum)

± .003

DIMENSIONS ARE NOMINAL VALUES IN INCHES, UNLESS OTHERWISE DESIGNATED.

**CONDUCTORS** AWG 24. 19 Strands of AWG 36,

Silver-Coated High-Strength Copper Alloy

**DIELECTRICS** 

Foamed FEP Colors - Light Blue/White

**FILLERS** Modified FEP

> WRAP **PTFE**

1st SHIELD - Flat

.0015 Strand Thickness, **Tin-Coated Copper** 

2nd SHIELD

AWG 38, **Tin-Coated Copper** 

**JACKET** Modified FEP

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. 2024V8424-9X.

A white laser markable outer jacket will be designated by a "-9LM" appended to the part number, e.g. 2024V8424-9LM.

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

CHARACTERISTIC IMPEDANCE 120 ± 12 ohms, Method D at 1 MHz with shield grounded

MUTUAL CAPACITANCE 12.7 pF/ft. (nominal)

VELOCITY OF PROPAGATION 77% (nominal)

**ATTENUATION** 1.0 dB/100 ft. (maximum) at 1 MHz

2.0 dB/100 ft. (maximum) at 6 MHz 2.7 dB/100 ft. (maximum) at 10 MHz 7.4 dB/100 ft. (maximum) at 100 MHz

## ADDITIONAL REQUIREMENTS

#### **ELECTRICAL**

CONDUCTOR RESISTANCE 27.8 ohms/1000 ft. (nominal)

(prior to cabling)

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**

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

LOW TEMPERATURE-COLD BEND -55°C/4.25 inch mandrel For 2024V8424-9LM only: UV LASER MARK CONTRAST **FULL MASK LASER** 67% (minimum)

DOT MATRIX LASER 60% (minimum) VOLTAGE WITHSTAND 1000 volts (rms), 1 minute

**PHYSICAL** 

(Post Environmental)

INSULATION (DIELECTRIC)

(prior to cabling)

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

**ELONGATION** 200% (minimum) 2000 lbf/in<sup>2</sup> (minimum) TENSILE STRENGTH

JACKET THICKNESS .008 inch (nominal)

SHIELD COVERAGE

1st SHIELD 92% (minimum) 2nd SHIELD 85% (minimum)

WRAP .002 inch thick (nominal), 25% overlap (minimum)

WEIGHT 22.3 lbs/1000 ft. (maximum)

**ENGINEERING REFERENCE** 

TEMPERATURE RATING 150°C (maximum)

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.

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