# SPECIFICATION CONTROL DRAWING

**2024J2424**

**CHEMINAX**

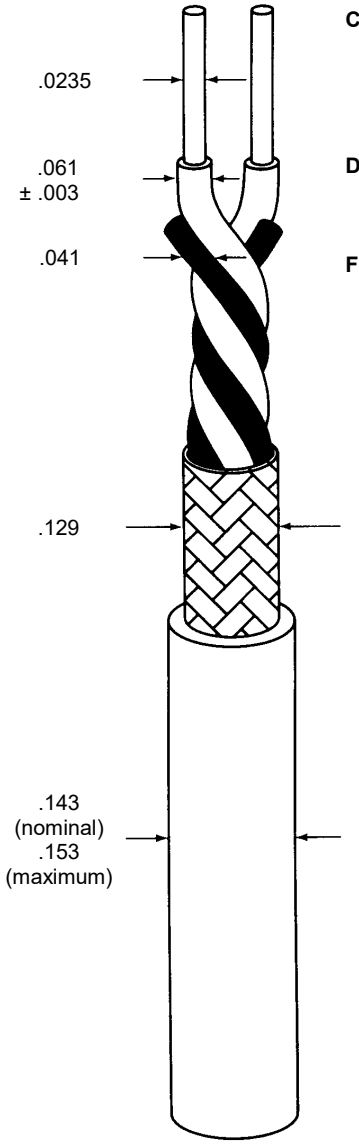
120 OHM, AWG 24, 19 STRANDS OF AWG 36, TWINAXIAL CABLE

Date: 08-05-24
Revision: G

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

## CONSTRUCTION DETAILS

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**
Radiation-Crosslinked, Modified ETFE

**SHIELD**
Flat,
.0015 Strand Thickness,
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. 2024J2424-9X).
Other codes and suffixes may be added to the part number, as necessary, to capture any additional requirements imposed by the purchase order.

## ELECTRICAL CHARACTERISTICS

| | |
|---|---|
| CHARACTERISTIC IMPEDANCE | 120 ± 12 ohms, Method D at 1 MHz with shield grounded |
| MUTUAL CAPACITANCE | 12.7 pF/ft. (nominal)<br>18.2 pF/ft. (maximum) |
| VELOCITY OF PROPAGATION | 77% (nominal) |
| ATTENUATION | 1.0 dB/100 ft (maximum) at 1 MHz<br>2.0 dB/100 ft (maximum) at 6 MHz<br>2.7 dB/100 ft (maximum) at 10 MHz<br>7.4 dB/100 ft (maximum) at 100 MHz |

## ADDITIONAL REQUIREMENTS

**ELECTRICAL**

| | |
|---|---|
| CONDUCTOR RESISTANCE (prior to cabling) | 27.8 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) | 1500 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 | 600 lbf/in$^2$ (minimum) |
| JACKET | |
| ELONGATION | 200% (minimum) |
| TENSILE STRENGTH | 2000 lbf/in$^2$ (minimum) |
| JACKET THICKNESS | .007 inch (nominal) |
| SHIELD COVERAGE | 92% (minimum) |
| WEIGHT | 14.5 lbs/1000 ft. (nominal) |

A white laser markable outer jacket will be designated by a "-9LM" appended to the part number, eg. 2024J2424-9LM.

**ENGINEERING REFERENCE**

| | |
|---|---|
| TEMPERATURE RATING | 150°C (maximum) |







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