

**SPECIFICATION CONTROL DRAWING**

**2019E0309**

**CHEMINAX**

120 OHM, AWG 19, 19 STRANDS OF 0.23 mm,  
TWISTED PAIR CABLE, J1939-15 COMPLIANT

Date: 1-9-15  
Revision: L

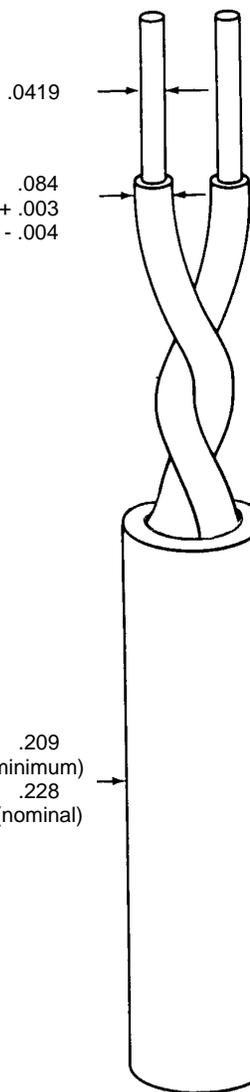
THIS SPECIFICATION SHEET FORMS A PART OF THE LATEST ISSUE OF RAYCHEM SPECIFICATION 1200.

**CONSTRUCTION DETAILS**

**ELECTRICAL CHARACTERISTICS**

DIMENSIONS ARE NOMINAL VALUES IN INCHES, UNLESS OTHERWISE DESIGNATED.

CHARACTERISTIC IMPEDANCE 120 ± 12 ohms, Method D at 1 MHz  
CAPACITANCE 10.5 pF/ft. (nominal) at 1 MHz  
VELOCITY OF PROPAGATION 67% (nominal)



**CONDUCTORS**  
AWG 19,  
19 Strands of 0.23 mm,  
Bare Copper

**DIELECTRICS**  
Rayfoam M  
Colors - Yellow/Green

**JACKET**  
Thermorad F

**ADDITIONAL REQUIREMENTS**

**ELECTRICAL**

CONDUCTOR RESISTANCE 7.47 ohms/1000 ft. (nominal)  
(prior to cabling)  
INSULATION RESISTANCE 10,000 megohms (minimum) for 1000 ft.  
VOLTAGE WITHSTAND (DIELECTRIC) 1500 volts (rms)

**ENVIRONMENTAL**

FLAMMABILITY Method C  
HEAT SHOCK 225°C  
LOW TEMPERATURE-COLD BEND -55°C/6.00 inch mandrel

**PHYSICAL**

CABLE LAY LENGTH 1.3 ± .2 inch  
INSULATION (DIELECTRIC)  
(prior to cabling)  
ELONGATION 150% (minimum)  
TENSILE STRENGTH 1500 lbf/in<sup>2</sup> (minimum)  
JACKET  
ELONGATION 200% (minimum)  
TENSILE STRENGTH 2000 lbf/in<sup>2</sup> (minimum)  
JACKET THICKNESS .025 inch (minimum),  
.030 inch (nominal),  
.040 inch (maximum)

CABLE IDENTIFICATION: Outer jacket shall be marked in white ink at 12 inch (nominal) intervals as follows:

for product jacketed in USA: "RAYCHEM J1939-15 0.75 mm<sup>2</sup>"  
for product jacketed in Mexico: "RAYCHEM J1939/15 0.75 mm<sup>2</sup>"

WEIGHT 23.5 lbs/1000 ft. (nominal)

**ENGINEERING REFERENCE**

TEMPERATURE RATING 125°C (maximum)

Designate outer jacket color with a dash number in accordance with MIL-STD-681. Unless otherwise specified, outer jacket color will be black designated by a "-0" appended to the part number, (e.g. 2019E0309-0). 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 Corporation also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

