

**SPECIFICATION CONTROL DRAWING**

**2020D1301**

**CHEMINAX**

120 OHM, AWG 20, 19 STRANDS OF AWG 32,  
OPTIMIZED SHIELD, TWINAXIAL CABLE

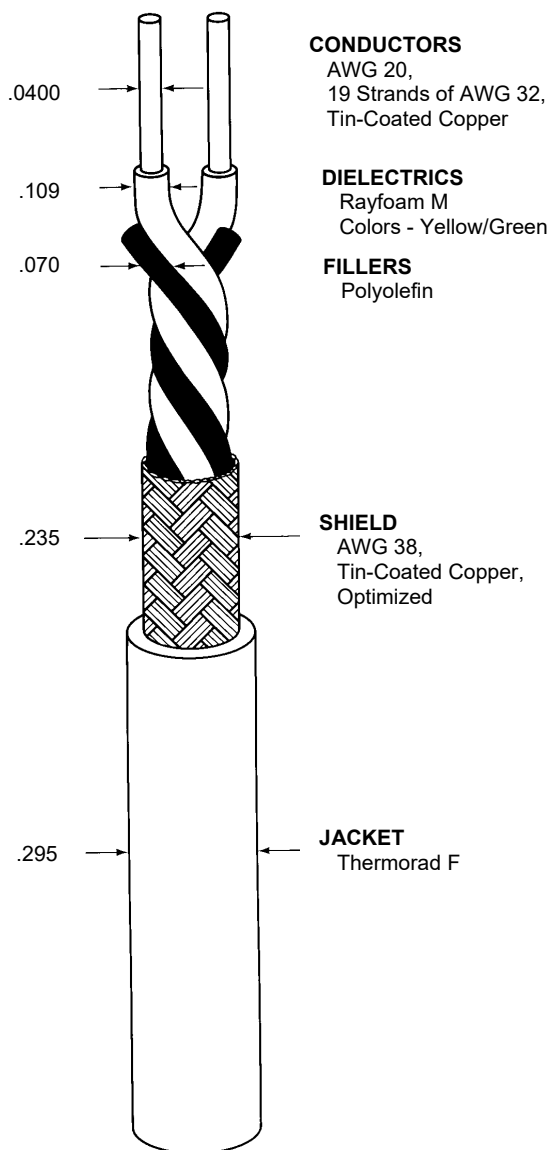
Date: 3-7-18  
Revision: D

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 20,  
19 Strands of AWG 32,  
Tin-Coated Copper

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

**FILLERS**  
Polyolefin

**SHIELD**  
AWG 38,  
Tin-Coated Copper,  
Optimized

**JACKET**  
Thermorad F

CHARACTERISTIC IMPEDANCE	120 ± 12 ohms, Method D at 1 MHz with shield grounded
MUTUAL CAPACITANCE	10.5 pF/ft. (nominal)
VELOCITY OF PROPAGATION	75% (nominal)
SURFACE TRANSFER IMPEDANCE (per SAE AS85485)	225 milliohms/meter (maximum) at 0.1 to 1 MHz

**ADDITIONAL REQUIREMENTS**

**ELECTRICAL**

CONDUCTOR RESISTANCE (prior to cabling)	9.53 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)	1000 volts (rms) (minimum)

**ENVIRONMENTAL**

FLAMMABILITY	Method C
HEAT SHOCK	225°C
LOW TEMPERATURE-COLD BEND	-55°C/8.00 inch mandrel
VOLTAGE WITHSTAND (Post Environmental)	1000 volts (rms), 1 minute

**PHYSICAL**

INSULATION (DIELECTRIC) (prior to cabling)	
ELONGATION	100% (minimum)
TENSILE STRENGTH	1000 lbf/in <sup>2</sup> (minimum)
JACKET	
ELONGATION	200% (minimum)
TENSILE STRENGTH	2000 lbf/in <sup>2</sup> (minimum)
JACKET THICKNESS	.030 inch (nominal)

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. 2020D1301-0). Other codes and suffixes may be added to the part number, as necessary, to capture any additional requirements imposed by the purchase order.

WEIGHT	41.6 lbs/1000 ft. (nominal)
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**ENGINEERING REFERENCE**

TEMPERATURE RATING	125°C (maximum)
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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.

