

SPECIFICATION CONTROL DRAWING

2021E0301

CHEMINAX

120 OHM, 0.508 mm², 19 STRANDS OF 0.19 mm,
TWINAXIAL CABLE, J1939-11 COMPLIANT

Date: 3-7-18
Revision: G

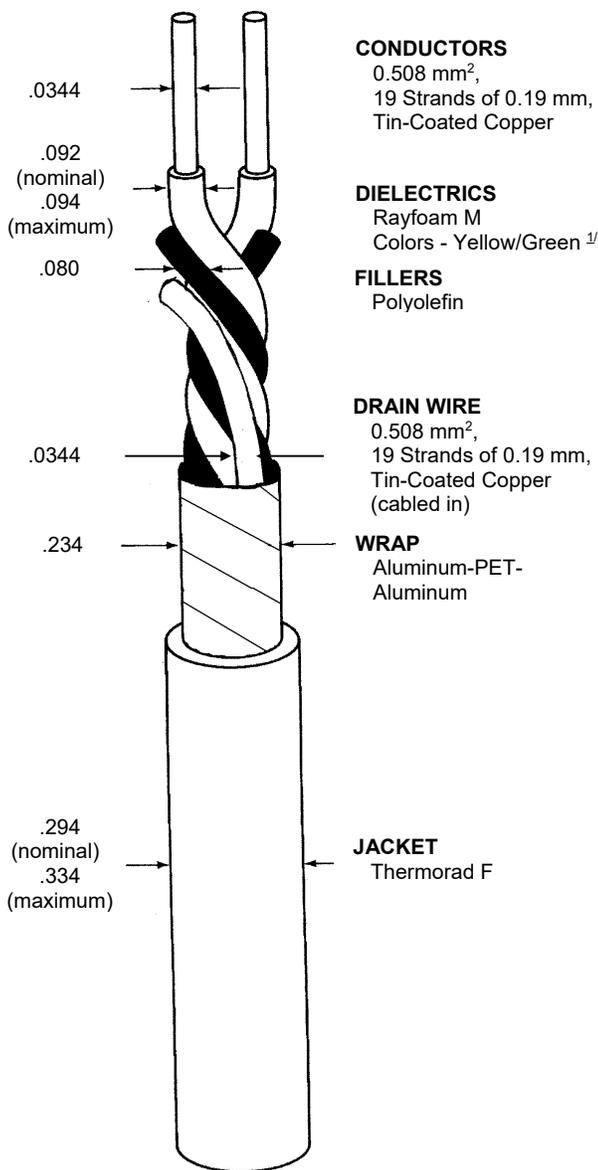
THIS SPECIFICATION SHEET FORMS A PART OF THE LATEST ISSUE OF RAYCHEM SPECIFICATION 1200.

CONSTRUCTION DETAILS

ELECTRICAL CHARACTERISTICS

DIMENSIONS ARE NOMINAL VALUES IN INCHES, UNLESS OTHERWISE DESIGNATED.

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



- CONDUCTORS**
0.508 mm²,
19 Strands of 0.19 mm,
Tin-Coated Copper
- DIELECTRICS**
Rayfoam M
Colors - Yellow/Green ^{1/}
- FILLERS**
Polyolefin
- DRAIN WIRE**
0.508 mm²,
19 Strands of 0.19 mm,
Tin-Coated Copper
(cabled in)
- WRAP**
Aluminum-PET-
Aluminum

ADDITIONAL REQUIREMENTS

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|---|---|
| ELECTRICAL | |
| CONDUCTOR RESISTANCE (prior to cabling) | 10.7 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) | |
| ELONGATION | 100% (minimum) |
| TENSILE STRENGTH | 1000 lbf/in ² (minimum) |
| JACKET | |
| ELONGATION | 200% (minimum) |
| TENSILE STRENGTH | 2000 lbf/in ² (minimum) |
| JACKET THICKNESS | .025 inch (minimum), .030 inch (nominal), .040 inch (maximum) |
| WRAP | .003 inch thick (nominal), 10% overlap (minimum) |

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. 2021E0301-0).

^{1/} Component Wire Stripe Option: Dielectrics striped red will be designated with a slash separating component wire colors, (e.g. 2021E0301-42/52-0).

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

CABLE IDENTIFICATION: Outer jacket shall be marked in white ink at 12 inch (nominal) intervals as follows: "RAYCHEM J1939-11 0.5 mm²"

| | |
|--------|-----------------------------|
| WEIGHT | 34.3 lbs/1000 ft. (nominal) |
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ENGINEERING REFERENCE

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|--------------------|-----------------|
| 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.

