

**SPECIFICATION CONTROL DRAWING**

**10612**

**CHEMINAX**

77 OHM, AWG 24, 19 STRANDS OF AWG 36, OPTIMIZED SHIELD,  
DATA BUS CABLE, MIL-STD-1553

Date: 2-13-18  
Revision: K

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 77 ± 5 ohms, Method C at 1 MHz  
MUTUAL CAPACITANCE 30.0 pF/ft. (98.4 pF/m) (maximum)  
ATTENUATION 1.4 dB/100 ft. (4.59 dB/100 m) (maximum) at 1 MHz  
SURFACE TRANSFER IMPEDANCE 100 milliohms/meter (maximum) (Per SAE AS85485) at 30 MHz

**ADDITIONAL REQUIREMENTS**

**COMPONENT WIRE PRIOR TO CABLING**  
(Test procedures per SAE AS22759)

CONDUCTOR RESISTANCE 26.5 ohms/1000 ft. (86.9 ohms/km) (nominal)  
CROSSLINKING PROOF TEST 300 ± 3°C for 1 hour, .500 inch (12.7 mm) mandrel, .375 lb (170 g), 2.5 kV dielectric test  
INSULATION (DIELECTRIC) ELONGATION 50% (minimum)  
TENSILE STRENGTH 5000 lbf/in<sup>2</sup> (34.5 N/mm<sup>2</sup>) (minimum)  
INSULATION FLAWS SPARK TEST 3.0 kV (rms)  
IMPULSE TEST 8.0 kV (peak)  
INSULATION RESISTANCE 5000 megohms for 1000 ft. (1524 megohms-km) (minimum)  
LOW TEMPERATURE-COLD BEND -65 ± 3°C for 4 hours, .750 inch (19.1 mm) mandrel, 1.00 lb (454 g), 2.5 kV dielectric test  
SHRINKAGE 200 ± 3°C for 1 hour, .125 inch (3.18 mm) (maximum) in 12 inches (305 mm)

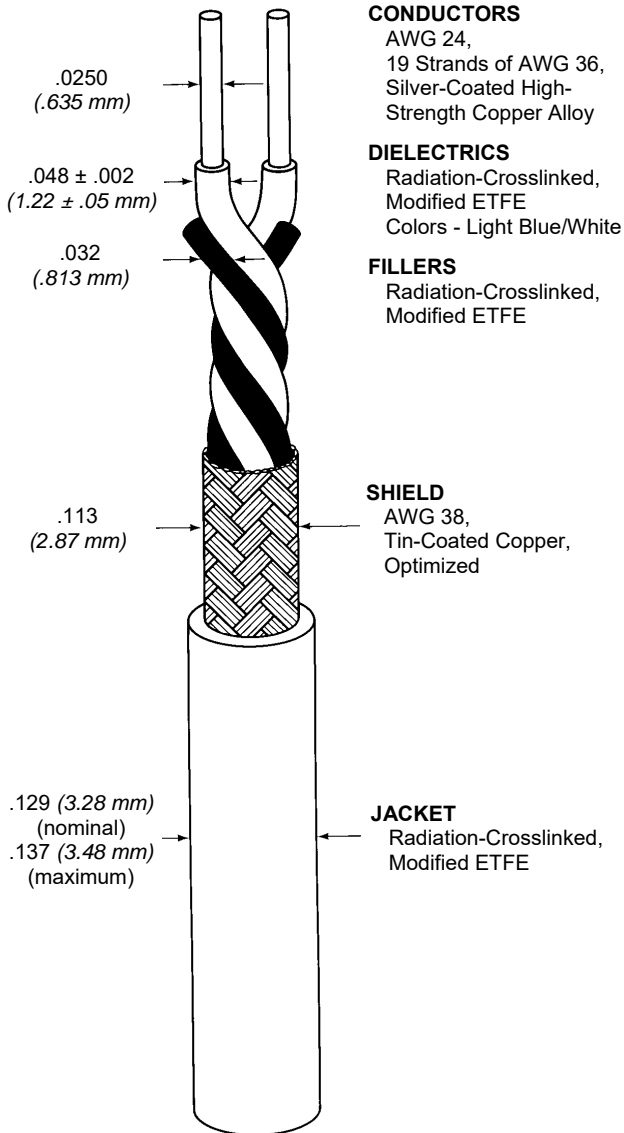
**FINISHED CABLE**

(Test procedures per NEMA WC 27500, unless otherwise specified)

BLOCKING 200°C for 6 hours  
CABLE LAY LENGTH .75 inch (19.1 mm) (minimum), 1.25 inches (31.8 mm) (maximum)  
CROSSLINKED VERIFICATION 300 ± 5°C for 6 hours, 6.00 inch (152 mm) mandrel  
FLAMMABILITY 3 seconds (maximum); 3 inches (76.2 mm) (maximum); no flaming of facial tissue  
JACKET ELONGATION 50% (minimum)  
TENSILE STRENGTH 5000 lbf/in<sup>2</sup> (34.5 N/mm<sup>2</sup>) (minimum)  
JACKET FLAWS SPARK TEST 1.0 kV (rms)  
IMPULSE TEST 6.0 kV (peak)  
JACKET THICKNESS .008 inch (.203 mm) (nominal)  
LOW TEMPERATURE-COLD BEND -55 ± 5°C for 4 hours, 6.00 inch (152 mm) mandrel  
VOLTAGE WITHSTAND (DIELECTRIC) 1000 volts (rms) (minimum)  
WEIGHT 15.9 lbs/1000 ft. (23.7 kg/km) (maximum)  
CABLE IDENTIFICATION: Outer jacket shall be marked in contrasting color at 12 inch (305 mm) (nominal) intervals between marks as follows: "10612 RAYCHEM"

**ENGINEERING REFERENCE**

TEMPERATURE RATING 150°C (maximum)



The conductor AWG size and outer jacket color will be appended to the part number. Unless otherwise specified, outer jacket color will be white designated by a "-9" in accordance with MIL-STD-681, (e.g. 10612-24-9).

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. 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.



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Multi-Conductor Cables](#) category:*

*Click to view products by [TE Connectivity](#) manufacturer:*

Other Similar products are found below :

[89504-002-1000](#) [89705-008-500](#) [6000FE-877-1000](#) [CS2885-000](#) [M27500-20SP2S23](#) [6309UE-877-1000](#) [M3905-BK005](#) [6502FE 8771000](#)  
[CW9530-000](#) [CX6543-000](#) [CXA-0066-20-4-9CS2973](#) [CXA-0078-16-1-9CS2405](#) [CXA-0078-22-4-9CS2405](#) [CXA-0078-24-4-9CS2405](#)  
[CXA-0140-16-6/9-9CS2405](#) [CY0660-000](#) [720451-000](#) [752687-000](#) [768146-000](#) [773159-000](#) [83318E-009-500](#) [8348-060-500](#) [83559-002-](#)  
[1000](#) [83653-002-5000](#) [8404-060-500](#) [8469 060100](#) [858171-000](#) [8628-060-500](#) [868361-001](#) [8730-060-1000](#) [8737-060-U1000](#) [8747-060-100](#)  
[8747-060-1000](#) [8769-060-1000](#) [8775-060-500](#) [8780-060-1000](#) [8782-001-U1000](#) [9159-060-500](#) [9318-060-1000](#) [939870-000](#) [9423 060U500](#)  
[9444 060U1000](#) [9497 0001000](#) [9520-060-1000](#) [9524-060-1000](#) [9546-060-500](#) [9572-002-U500](#) [9774-060-1000](#) [A43962-000](#) [1232A1-008-](#)  
[1000](#)