SPECIFICATION CONTROL DRAWING

10599

CHEMINAX

70 OHM, AWG 22, 19 STRANDS OF AWG 34, DATA BUS CABLE, MIL-STD-1553A

Date 3-20-12 Revision

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 70 ± 5 ohms, Method C at 1 MHz

MUTUAL CAPACITANCE 30 pF/ft. (maximum)

ATTENUATION 1.0 dB/100 ft. (maximum) at 1 MHz

CONDUCTORS AWG 22, 19 Strands of AWG 34, Tin-Coated .0295 Copper **DIELECTRICS** .057 Radiation-Crosslinked. $\pm .003$ Modified ETFE Color - Light Blue / White

SHIELD

JACKET

AWG 38.

Tin-Coated Copper

Radiation-Crosslinked,

Modified ETFE

ADDITIONAL REQUIREMENTS

COMPONENT WIRE PRIOR TO CABLING (Test Procedures per SAE AS22759)

CROSSLINKING PROOF TEST 300 ± 3°C for 7 hours. .500 inch mandrel.

INSULATION (DIELECTRIC)

ELONGATION 50% (minimum) TENSILE STRENGTH 5000 lbf/in² (minimum)

INSULATION FLAWS

SPARK TEST 3.0 kV (rms) **IMPULSE TEST** 8.0 kV (peak)

INSULATION RESISTANCE 5000 megohms for 1000 ft. (minimum)

-65 ± 3°C for 4 hours, 1.00 inch mandrel, LOW TEMPERATURE-COLD BEND 1.00 lb., 2.5 kV dielectric test

SHRINKAGE $200 \pm 3^{\circ}$ C for 6 hours,

.125 inch (maximum) in 12 inches

.500 lb., 2.5 kV dielectric test

FINISHED CABLE (Test Procedures per NEMA WC 27500 unless otherwise specified)

BLOCKING

CABLE LAY LENGTH

CROSSLINKED VERIFICATION

FLAMMABILITY

(Method B of Spec 1200)

JACKET

ELONGATION TENSILE STRENGTH

JACKET FLAWS SPARK TEST

IMPULSE TEST JACKET THICKNESS

LOW TEMPERATURE-COLD BEND

SHIELD COVERAGE TEMPERATURE RATING

VOLTAGE WITHSTAND (DIELECTRIC)

200°C for 6 hours

.75 inch (minimum), 1.25 inch (maximum) 300 ± 5 °C for 6 hours, 1.75 inch mandrel 3 seconds (maximum); 3 inch (maximum);

no flaming of facial tissue

50% (minimum) 5000 lbf/in² (minimum)

1.0 kV (rms) 6.0 kV (peak) .008 inch (nominal)

-55 \pm 5°C for 4 hours, 6.00 inch mandrel

90% (minimum) -65°C to 150°C

1000 volts (rms) (minimum)

Outer jacket color will be white (designated by a "-9" appended to the part number, e.g. 10599-22-9) unless otherwise specified.

Designate outer jacket color with a dash number in accordance with MIL-STD-681. 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 contrasting color at 12 inch (nominal) intervals as follows: " 10599 - XXXXX " (XXXXX = CAGE code)

Example: " 10599 - 06090 " for US manufacture " 10599 - K1010 " for UK manufacture

17.6 lbs/1000 ft. (maximum) WEIGHT

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.

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.131

.147

(nominal)

.154

(maximum)

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