## SPECIFICATION CONTROL DRAWING

Date

**CHEMINAX** 

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

3-20-12 Revision

10599

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. ± .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

 $300 \pm 3^{\circ}$ C for 7 hours. .500 inch mandrel.

.500 lb., 2.5 kV dielectric test

**INSULATION (DIELECTRIC)** 

**ELONGATION** TENSILE STRENGTH 50% (minimum) 5000 lbf/in<sup>2</sup> (minimum)

**INSULATION FLAWS** 

3.0 kV (rms)

SPARK TEST **IMPULSE TEST** 

8.0 kV (peak) 5000 megohms for 1000 ft. (minimum)

INSULATION RESISTANCE LOW TEMPERATURE-COLD BEND

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

SHRINKAGE

 $200 \pm 3^{\circ}$ C for 6 hours, .125 inch (maximum) in 12 inches

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

**BLOCKING** 

CABLE LAY LENGTH

**CROSSLINKED VERIFICATION** 

**FLAMMABILITY** 

(Method B of Spec 1200)

200°C for 6 hours .75 inch (minimum), 1.25 inch (maximum)  $300 \pm 5$ °C for 6 hours, 1.75 inch mandrel

JACKET

no flaming of facial tissue 50% (minimum)

**ELONGATION** 

5000 lbf/in<sup>2</sup> (minimum)

TENSILE STRENGTH JACKET FLAWS SPARK TEST

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

IMPULSE TEST JACKET THICKNESS

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

3 seconds (maximum); 3 inch (maximum);

LOW TEMPERATURE-COLD BEND SHIELD COVERAGE TEMPERATURE RATING

90% (minimum) -65°C to 150°C

**VOLTAGE WITHSTAND** (DIELECTRIC)

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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TE Connectivity: 10599-22-9