## SPECIFICATION CONTROL DRAWING

**CHEMINAX** 

DESIGNATED

.0400

.082

.055

.181

.199

.216

.234

77 OHM, AWG 20, 19 STRANDS OF AWG 32, DATA BUS CABLE

Date 8-20-12
Revision A

7720C5662

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

### **CONSTRUCTION DETAILS**

DIMENSIONS ARE NOMINAL VALUES IN INCHES UNLESS OTHERWISE

CHARACTERISTIC IMPEDANCE

77 ± 5 ohms, Method C at 1 MHz

MUTUAL CAPACITANCE

30 pF/ft. (maximum)

**ATTENUATION** 

1.0 dB/100 ft. (nominal) at 1 MHz

## CONDUCTORS

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

### **DIELECTRICS**

Radiation-Crosslinked, Modified ETFE Colors - Light Blue / White

### FILLERS

Radiation-Crosslinked, Modified ETFE

# 1st SHIELD

AWG 38,

Silver-Coated Copper

## 1st JACKET

Radiation-Crosslinked, Modified ETFE

# 2<sup>nd</sup> SHIELD

2<sup>nd</sup> JACKET

Modified ETFE

AWG 38, Silver-Coated Copper

Radiation-Crosslinked.

oated Copper

FLAMMABILITY

(Method B of Spec 1200)

JÀCKET

ELONGATION TENSILE STRENGTH

JACKET FLAWS SPARK TEST

IMPULSE TEST
JACKET THICKNESS (each)
LOW TEMPERATURE-COLD BEND

SHIELD COVERAGE (each)
VOLTAGE WITHSTAND

CONDUCTOR TO SHIELD

SHIELD TO SHIELD

Cheminax, Raychem, TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks.

### ADDITIONAL REQUIREMENTS

**ELECTRICAL CHARACTERISTICS** 

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

50% (minimum) 5000 lbf/in² (minimum)

CROSSLINKING PROOF TEST 300 ± 3°C for 1 hour, 1.00 inch mandrel, .625 lb., 2.5 kV dielectric test

CONDUCTOR RESISTANCE 8.87 ohms/1000 ft. (nominal)

INSULATION (DIELECTRIC) (total insulation)

ELONGATION
TENSILE STRENGTH

INSULATION FLAWS
SPARK TEST

IMPULSE TEST
INSULATION RESISTANCE

LOW TEMPERATURE-COLD BEND

SHRINKAGE

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

-65 ± 3°C for 4 hours, .750 inch mandrel, 1.00 lb. 2.5 kV dielectric test

200 ± 3°C for 1 hour, .125 inch (maximum) in 12 inches

### FINISHED CABLE

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

BLOCKING 200°C for 6 hours CABLE LAY LENGTH .75 inch (minimum),

CABLE LAY LENGTH ./5 inch (minimum),

1.25 inches (maximum)

CROSSLINKED VERIFICATION 300 ± 5°C for 6 hours, 6

300 ± 5°C for 6 hours, 6.00 inch mandrel 3 seconds (maximum); 3 inches (maximum); no flaming of facial tissue

50% (minimum) 5000 lbf/in² (minimum)

1.0 kV (rms) 6.0 kV (peak) .009 inch (nominal)

 $-55 \pm 5^{\circ}$ C for 4 hours, 6.00 inch mandrel

90% (minimum)

1500 volts (rms) 500 volts (rms)

Outer jacket color will be white (designated by a "-9" appended to the part number, e.g. 7720C5662-9) 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.

WEIGHT 45.9 lbs/1000 ft. (nominal)

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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