SPECIFICATION CONTROL DRAWING 7724C1664

CHEMINAX

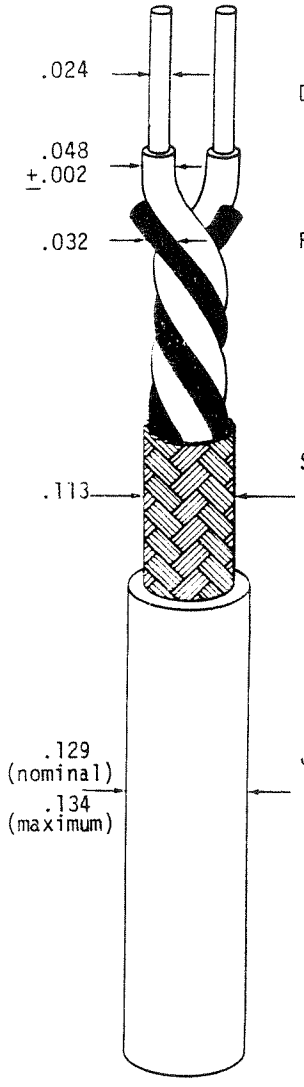
DATA BUS CABLE, OPTIMIZED SINGLE SHIELD, MULTIPLEX, MIL-STD-1553

Date: 2-14-86
Revision: D

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

CONSTRUCTION DETAILS

DIMENSIONS ARE NOMINAL VALUES IN INCHES UNLESS OTHERWISE DESIGNATED.



CONDUCTORS
AWG 24, 19 Strands of AWG 36, Silver-Coated High Strength Copper Alloy

DIELECTRICS
Radiation-Crosslinked, Modified ETFE
Color - Light Blue/White
Permittivity - 2.7 (nominal)

FILLERS
Radiation-Crosslinked, Modified ETFE
Color - White

SHIELD
AWG 38
Silver-Coated High Strength Copper Alloy
Optimized

JACKET
Radiation-Crosslinked, Modified ETFE
Color - White

Designate outer jacket color with a dash number in accordance with MIL-STD-681.

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC IMPEDANCE	77 ± 5 ohms, Method C at 1 MHz
CAPACITANCE - MUTUAL	30 pF/ft. (maximum)
ATTENUATION	1.4 dB/100 ft. (maximum) at 1 MHz
SURFACE TRANSFER IMPEDANCE	80 milliohms/meter (maximum) from 10 kHz to 100 MHz Ⓓ

ADDITIONAL REQUIREMENTS

COMPONENT WIRE PRIOR TO CABLING (Per MIL-W-22759)

ACCELERATED AGING (per MIL-W-22759 Life Cycle procedure)	300 + 3°C for 7 hours, .500 inch mandrel, .375 lb., 2.5 kV dielectric test
LOW TEMPERATURE - COLD BEND	-65 + 2°C for 4 hours, .750 inch mandrel, 1.00 lb, 2.5 kV dielectric test
SHRINKAGE	200 + 3°C for 6 hours, .125 inch (maximum) in 12 inches
INSULATION RESISTANCE	5000 MΩ for 1000 ft. (minimum)
INSULATION (DIELECTRIC)	
TENSILE STRENGTH	5000 psi (minimum)
ELONGATION	50% (minimum)
IMPULSE DIELECTRIC TEST	8.0 kV (peak), 100% test

FINISHED CABLE (Per MIL-C-27500)

BLOCKING	200°C for 6 hours
LOW TEMPERATURE - COLD BEND	-65 + 2°C for 4 hours 3 inch mandrel
THERMAL SHOCK	300 + 5°C for 6 hours 1.25 inch mandrel
FLAMMABILITY (Per Raychem Spec. 55A, procedure 1)	3 seconds (maximum); 3 inches (maximum), no flaming of facial tissue
SHIELD COVERAGE	90% (minimum)
JACKET FLAWS	
SPARK TEST	1000 volts, 60 Hz, 100% test
IMPULSE TEST	6.0 kV (peak)
VOLTAGE WITHSTAND (DIELECTRIC)	1000 volts (rms)(minimum)
WALL THICKNESS	.008 in. (nominal)
JACKET	
TENSILE STRENGTH	5000 psi (minimum)
ELONGATION	50% (minimum)

The length of lay shall be .75 inch (minimum) to 1.25 inches (maximum).

WEIGHT	15.9 lbs/1000 ft. (maximum)

Raychem

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