SPECIFICATION CONTROL DRAWING

7724G3664

CHEMINAX

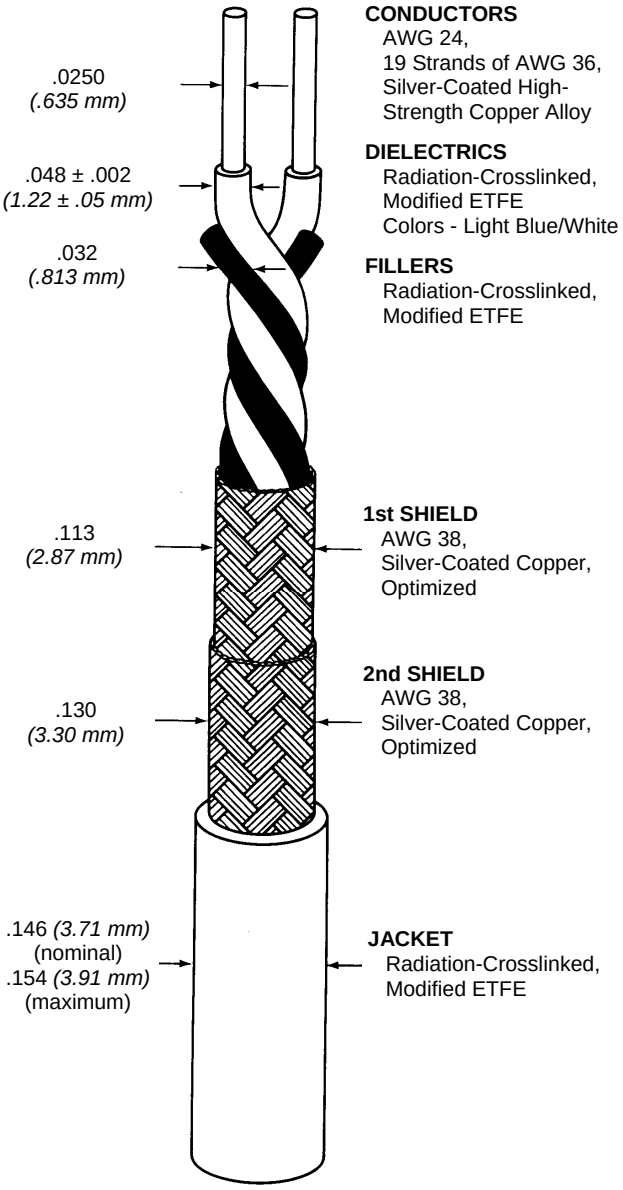
77 OHM, AWG 24, 19 STRANDS OF AWG 36,
OPTIMIZED DOUBLE SHIELDS, DATA BUS CABLE, MIL-STD-1553

Date: 1-3-18
Revision: A

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
Colors - Light Blue/White

FILLERS
Radiation-Crosslinked, Modified ETFE

1st SHIELD
AWG 38,
Silver-Coated Copper, Optimized

2nd SHIELD
AWG 38,
Silver-Coated Copper, Optimized

JACKET
Radiation-Crosslinked, Modified ETFE

Designate outer jacket color with a dash number in accordance with MIL-STD-681. Unless otherwise specified, outer jacket color will be white designated by a "-9" appended to the part number, (e.g. 7724G3664-9).
Other codes and suffixes may be added to the part number, as necessary, to capture any additional requirements imposed by the purchase order.

ELECTRICAL CHARACTERISTICS

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 (Per SAE AS85485)	10 milliohms/meter (maximum) 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^2 *(34.5 N/mm^2)* (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 (Method B of Spec 1200)	3 seconds (maximum), 3 inches *(76.2 mm)* (maximum); no flaming of facial tissue
JACKET	
ELONGATION	50% (minimum)
TENSILE STRENGTH	5000 lbf/in^2 *(34.5 N/mm^2)* (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	21.7 lbs/1000 ft. *(32.3 kg/km)* (nominal)

ENGINEERING REFERENCE

TEMPERATURE RATING	200°C (maximum)

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.

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THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.

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