SPECIFICATION CONTROL DRAWING

10612



.0250

(.635 mm)

.048 ± .002

 $(1.22 \pm .05 mm)$

032

(.813 mm)

.113

(2.87 mm)

.129 (3.28 mm)

(nominal)

.137 (3.48 mm)

(maximum)

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

Date: 2-13-18 Κ 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

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 100 milliohms/meter (maximum)

(Per SAE AS85485)

at 30 MHz

Strength Copper Alloy **DIELECTRICS**

Modified ETFE

Modified ETFE

FILLERS

SHIELD

AWG 38,

Optimized

JACKET

Tin-Coated Copper,

Radiation-Crosslinked.

Modified ETFE

Silver-Coated High-

Radiation-Crosslinked,

Radiation-Crosslinked,

Colors - Light Blue/White

CONDUCTORS

AWG 24.

19 Strands of AWG 36, ADDITIONAL REQUIREMENTS

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

CONDUCTOR RESISTANCE

26.5 ohms/1000 ft. (86.9 ohms/km) (nominal) 300 ± 3°C for 1 hour,

CROSSLINKING PROOF TEST

.500 inch (12.7 mm) mandrel, .375 lb (170 g), 2.5 kV dielectric test

INSULATION (DIELECTRIC)

ELONGATION 50% (minimum) 5000 lbf/in² (34.5 N/mm²) (minimum) TENSILE STRENGTH

NSULATION 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 \pm 3°C for 4 hours,

.750 inch (19.1 mm) mandrel, 1.00 lb (454 g), 2.5 kV dielectric test

200 ± 3°C for 1 hour,

SHRINKAGE .125 inch (3.18 mm) (maximum)

in 12 inches (305 mm)

FINISHED CABLE

(Test procedures per NEMA WC 27500, unless otherwise specified)

200°C for 6 hours

BLOCKING

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

FI AMMABII ITY (Method B of Spec 1200)

3 seconds (maximum): 3 inches (76.2 mm) (maximum); no flaming of facial tissue

ELONGATION 50% (minimum)

TENSILE STRENGTH

5000 lbf/in² (34.5 N/mm²) (minimum)

JACKET FLAWS SPARK TEST

1.0 kV (rms) **IMPULSE TEST** 6.0 kV (peak)

JACKET THICKNESS OW TEMPERATURE-COLD BEND

.008 inch (.203 mm) (nominal)

 -55 ± 5 °C for 4 hours. 6.00 inch (152 mm) mandrel

VOLTAGE WITHSTAND (DIELECTRIC)

1000 volts (rms) (minimum)

The conductor AWG size and outer jacket color will be appended to the part number. Unless otherwise specified, outer jacket color will be white designated by a "-9" in accordance with MIL-STD-681, (e.g. 10612-24-9).

15.9 lbs/1000 ft. (23.7 kg/km) (maximum) CABLE IDENTIFICATION: Outer jacket shall be marked in contrasting color at 12 inch (305 mm) (nominal) intervals between marks as follows: "10612 RAYCHEM"

Other codes and suffixes may be added to the part number, as necessary, to capture any additional requirements imposed by the purchase order.

ENGINEERING REFERENCE

TEMPERATURE RATING 150°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.

WEIGHT

Page 1 of 1

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