

SPECIFICATION CONTROL DRAWING

7820D0831

CHEMINAX

78 OHM, AWG 20, 19 STRANDS OF AWG 32, TWINAXIAL CABLE

Date: 11-05-24
Revision: D

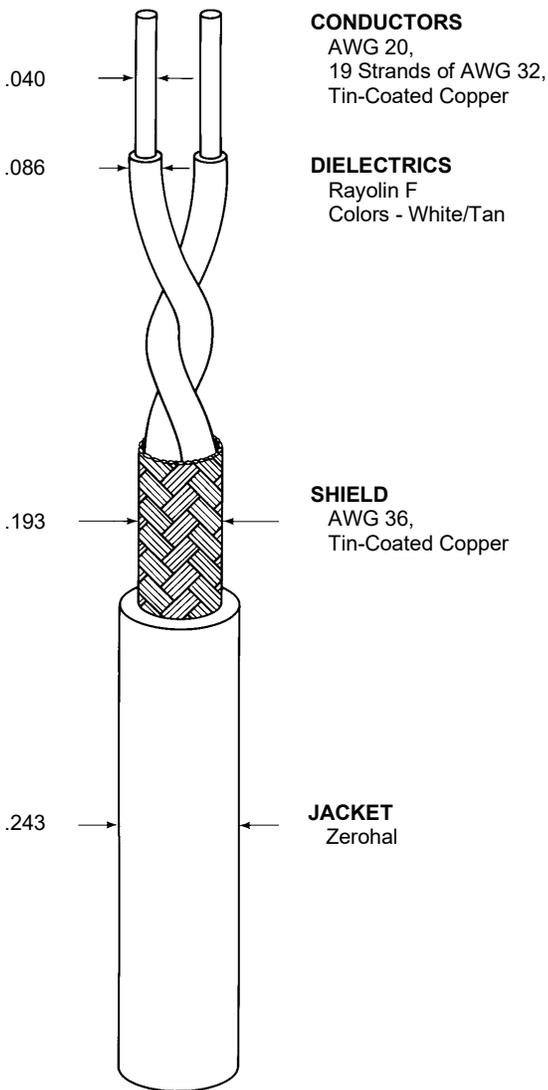
THIS SPECIFICATION SHEET FORMS A PART OF THE LATEST ISSUE OF RAYCHEM SPECIFICATION 1200.

CONSTRUCTION DETAILS

ELECTRICAL CHARACTERISTICS

DIMENSIONS ARE NOMINAL VALUES IN INCHES, UNLESS OTHERWISE DESIGNATED.

CHARACTERISTIC IMPEDANCE 78 ± 7 ohms, Method C at 1 MHz
CAPACITANCE
CONDUCTOR TO CONDUCTOR 18.8 pF/ft. (nominal)
VELOCITY OF PROPAGATION 67% (nominal)



CONDUCTORS
AWG 20,
19 Strands of AWG 32,
Tin-Coated Copper

DIELECTRICS
Rayolin F
Colors - White/Tan

SHIELD
AWG 36,
Tin-Coated Copper

JACKET
Zerohal

ADDITIONAL REQUIREMENTS

ELECTRICAL

CONDUCTOR RESISTANCE 10.4 ohms/1000 ft. (nominal)
(prior to cabling)
INSULATION RESISTANCE 10,000 megohms (minimum)
for 1000 ft.
JACKET FLAWS
SPARK TEST 1.0 kV (rms)
IMPULSE TEST 6.0 kV (peak)
VOLTAGE WITHSTAND (DIELECTRIC) 1000 volts (rms) (minimum)

ENVIRONMENTAL

FLAMMABILITY Method B, 60 seconds (maximum)
Afterburn: 3 inch (maximum)
burn length
HEAT SHOCK 225°C
LOW TEMPERATURE-COLD BEND -30°C/7.00 inch mandrel
VOLTAGE WITHSTAND (Post Environmental) 1000 volts (rms), 1 minute

PHYSICAL

INSULATION (DIELECTRIC)
(prior to cabling)
ELONGATION 200% (minimum)
TENSILE STRENGTH 1800 lbf/in² (minimum)
JACKET
ELONGATION 150% (minimum)
TENSILE STRENGTH 1200 lbf/in² (minimum)
JACKET THICKNESS .025 inch (nominal)
SHIELD COVERAGE 90% (minimum)

Designate outer jacket color with a dash number in accordance with MIL-STD-681. Unless otherwise specified, outer jacket color will be black designated by a "-0" appended to the part number, e.g. 7820D0831-0.

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

WEIGHT 33.7 lbs/1000 ft. (nominal)

ENGINEERING REFERENCE

TEMPERATURE RATING 105°C (maximum)

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.

