



SPECIFICATION CONTROL DRAWING

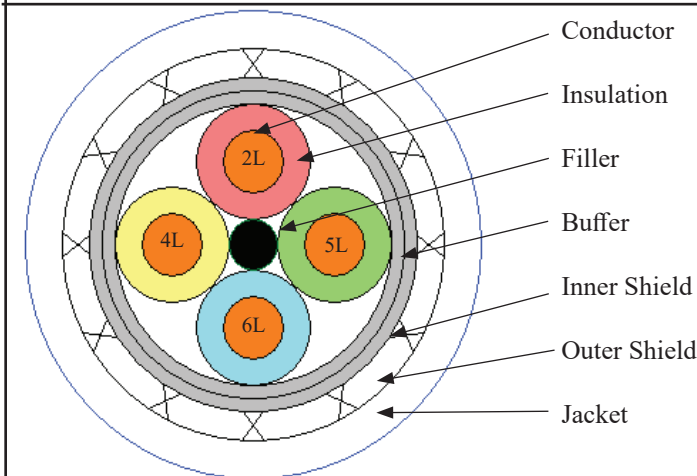
THX-26C422-814

QUADRAX CABLE, 100 BASE-T, ETHERNET, AWG 26

Date: 01/8/2020
Issue: B
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THIS SPECIFICATION SHEET FORMS A PART OF THE LATEST ISSUE OF RAYCHEM SPECIFICATION 1200.

CONSTRUCTION DETAILS



Single Component

Dimensions
inches (nom)

Conductor: AWG 26 19/38, silver-coated high strength copper alloy

.0185

Insulation: Foamed FEP

.035

Cable Assembly

Filler: Solid FEP

.015

Layer 1: 4 single components

.085

Buffer: Fluoropolymer wrap, .002 inch thick (nom).

.097

Inner Shield: Aluminum/PET wrap, .002 inch thick (nom), Al. facing out.

.105

Outer Shield: AWG 38, tin-coated copper, 85% min coverage.

.122

Jacket: FEP .012 inch thickness

.145 ± .007

Cable Weight 17.43 lbs/kft (nominal)

Designate outer jacket color with a dash number appended to the part number.
Example: Clear; THX-26C422-814-X.

TABLE I

Single Components	Pair	Wire Insulation color
1	1	2L (light red)
2	2	5L (light green)
3	1	6L (light blue)
4	2	4L (light yellow)

Color code designators shall be in accordance with MIL-STD-681. An "L" after the number indicates a light color.

ELECTRICAL CHARACTERISTICS

TABLE II

Frequency MHz	Insertion Loss dB/100m (max)	Return Loss dB/100m (min)	NEXT dB/100m (min)	Propagation Delay ns/100m (max)
1	3.3	20.0	65.3	570
4	6.7	23.0	56.3	552
8	9.5	24.5	51.8	547
10	10.7	25.0	50.3	545
16	13.4	25.0	47.3	543
20	15.3	25.0	45.8	542
25	17.1	24.2	44.3	541
31.25	19.2	23.3	42.9	540
62.5	27.9	20.7	38.5	539
100	36.1	19.0	35.3	538

Note: Values in Table II for RL and NEXT are for reference only. Actual values shall be determined utilizing the formulas in ANSI/TIA-568.2 (issue in effect).

Impedance: 100 ohms (nominal) at 1 to 100 MHz.

Mutual Capacitance: 13.0 pF/ft. (nominal) at 1 kHz.

Conductor DC Resistance: 44.4 ohms/1000 ft. (nominal) @ 20°C

Velocity of Propagation: 75.2% (nominal)

Electrical Testing: In accordance with ANSI/TIA-568.2 (issue in effect).

ADDITIONAL REQUIREMENTS & RATINGS

Temperature Rating: -65°C to 150°C

Voltage Withstand: 1000 volts (rms), conductor to conductor and shield

Jacket Tensile Strength: 2000 psi minimum

Jacket Elongation: 200% minimum

Jacket Flaws: Spark Test: 2.5 kV (rms)

Impulse Dielectric Test: 6.0 kV (peak)

Flammability: Finished cable shall meet the requirements of FAR Part 25, Appendix F, Part I when tested in accordance with the 60° test specification herein.

Marker Tape: There shall be a marker tape under the jacket with the following legend:
"RAYCHEM THX-26C422-814 06090 A - B"

Every other mark is an inverted mirror image. The orientation of the tape shall be as follows: The "A" end components shall be Red, Green, Blue and Yellow in a clockwise direction. The "B" end components shall be Red, Yellow, Blue, and Green in a clockwise direction.

Cable will be supplied in 50 ft minimum lengths unless otherwise specified.

TE Connectivity Corporation
Raychem Wire & Cable
501 Oakside Avenue
Redwood City, California 94063-3800
1-800-522-6752Other codes and suffixes may be added to the part number, as necessary, to capture any additional requirements imposed by the purchase order. Users should evaluate the suitability of this product for their application. TE Connectivity Corporation also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.
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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