



**SPECIFICATION CONTROL DRAWING**

**C5E-24C124-C14**

**CAT5e CABLE, AWG 24**

Date: 8/29/2018  
Issue: Issue D  
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THIS SPECIFICATION SHEET FORMS A PART OF THE LATEST ISSUE OF RAYCHEM SPECIFICATION 1200.

**CONSTRUCTION DETAILS**

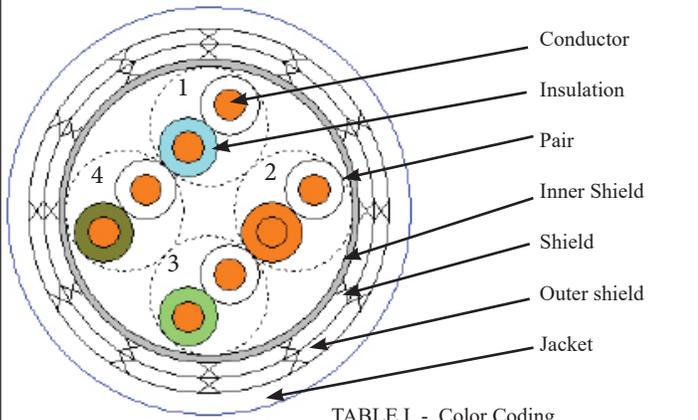


TABLE I - Color Coding

Pair #	Conductor #1	Conductor #2
1	9 (white)	6L (light blue)
2	9 (white)	3L (light orange)
3	9 (white)	5L (light green)
4	9 (white)	1L (light brown)

TABLE II

<u>Pair Component</u>		<u>Dimensions</u> inches (nom)
Conductor:	AWG 24 19/36, Tin-coated Copper	.0235
Insulation:	Foamed FEP	.0460
<u>Cable Assembly</u>		
Core:	4 Pairs	.200
Inner Shield	Aluminum/PET Wrap, .0025 inch thick, Al facing out	.210
Shield:	AWG 36, tin-coated copper	.231
Outer Shield	AWG 36, tin-coated copper	.252
Jacket:	FEP, .015 inch thickness	.282 + .032
Cable Weight:	61.11 lbs/kft	

Designate outer jacket color with a dash number appended to the part number. Example: White jacket; C5E-24C124-C14-9

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

**ELECTRICAL CHARACTERISTICS**

TABLE III

Frequency MHz	Insertion Loss dB/100m (max)	Return Loss dB/100m (min)	NEXT dB/100m (min)	ELFEXT dB/100m (min)	PS NEXT dB/100m (min)	PSACRF dB/100m (min)	Propagation Delay ns/100m (max)
1	2.4	20.0	65.3	65.3	62.3	60.8	570
4	4.9	23.0	56.3	51.8	53.3	48.8	552
8	6.9	24.5	51.8	45.7	48.8	42.7	547
10	7.8	25.0	50.3	43.8	47.3	40.8	545
16	9.9	25.0	47.3	39.7	44.3	36.7	543
20	11.1	25.0	45.8	37.8	42.8	34.8	542
25	12.5	24.2	44.3	35.8	41.3	32.8	541
31.25	14.1	23.3	42.9	33.9	39.9	30.9	540
62.5	20.4	20.7	38.4	27.9	35.4	24.9	539
100	26.4	19.0	35.3	23.8	32.3	20.8	538

Note: Values in Table III for RL and NEXT are for reference only. Actual values shall be determined utilizing the formulas in ANSI/TIA-568-C.2.

Electrical Testing: In accordance with ANSI/TIA-568-C.2.  
 Capacitance: Mutual Capacitance: 5.6 nF/100 m (max) at 1 kHz.  
 Pair to ground capacitance unbalance: 330 pF/100 m (max) at 1 kHz.  
 Impedance: 100 ± 15 ohms at 1 to 100 MHz. (for reference only).  
 Conductor DC Resistance: 25.7 ohms/1000ft (nominal) @ 20°C  
 Velocity of Propagation: 75% (nominal)

TE Connectivity Corporation  
Raychem Wire & Cable  
501 Oakside Avenue  
Redwood City, California 94063-3800  
1-800-522-6752

Other 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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### ADDITIONAL REQUIREMENTS & RATINGS

Temperature Rating: -65C to +150°C

Voltage Withstand: 1000 volts (rms), conductor to conductor and shield.  
500 volts (rms) shield to shield when applicable per NEMA WC 27500.

Flammability: Shall meet the requirements of FAR Part 25.869 (a)(4) Appendix F, Part I (a) (3) when tested in accordance with Appendix F Part I (b) (7).

Jacket tensile strength: 2000 psi min  
Jacket elongation: 200% min.

Jacket Flaws: 2.5 kV (rms)  
Impulse Dielectric Test 6.0 kV (peak)

Marker Tape: There shall be a marker tape under the jacket with the following legend:  
"RAYCHEM C5E-24C124-C14 06090"  
Every other mark is inverted.

Shield Coverage: First and second shield 85% min.

Shield: 2nd shield design shall be tin lock compatible.  
(Size 05 entry)

Testing: This cable is to be tested in accordance with SPEC1200 as applicable.

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