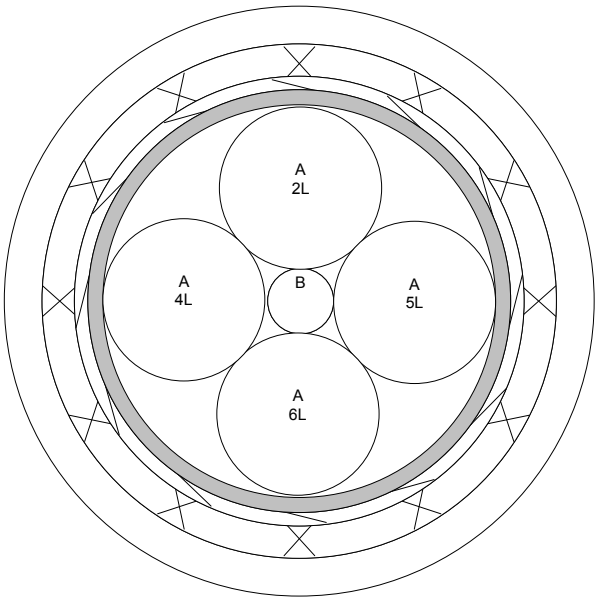
Raychem

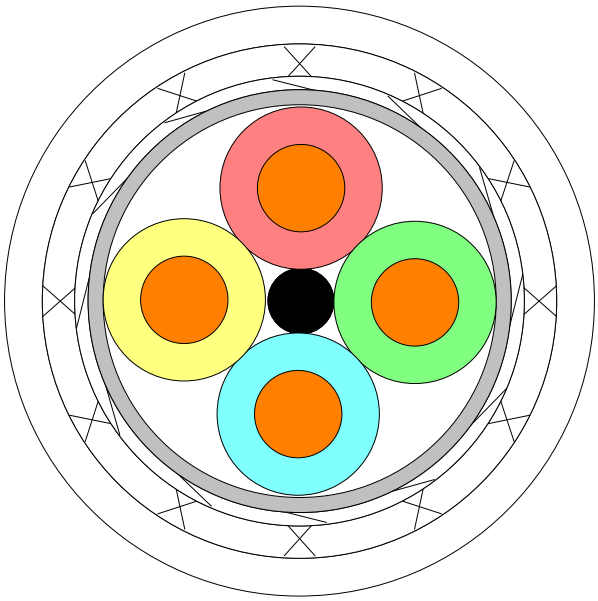
Specification Control Drawing

CEC-RWC-18687
4 conductor cable
Issue D - 9/10/2012

Identification, colors & marks

Cross section





Components

ID	Quantity	Part number	Description
A	4	RAYFOAM-H2444C4	Dielectric
B	1	FEP Filler .017	Primary wire

Cable

Outer	Description	Thickness Inches	Thickness *mm*	OD Inches	OD *mm*
Layer 1				0.104	*2.63*
Wrap	Fluoropolymer Wrap .002"	0.004	*0.10*	0.112	*2.83*
Shield	Flat silver copper 36 awg regular	0.004	*0.09*	0.119	*3.01*
Shield	Round silver copper 38 awg regular	0.009	*0.22*	0.136	*3.44*
Jacket	FEP white	0.010	*0.25*	0.156	*3.95*
Cable OD tolerance				+ 0.008	*+ 0.20*

Weight	23.38 lb/kft	*34.86 Kg/Km*

RCD Version 1.2 Level 1 Ser #5 RWC 8/7/95

Continued

Physical properties

Jacket tensile strength	2000 psi minimum
Jacket elongation	200% minimum
Wrap	25% (minimum) overlap
Flat Braid	Braid AWG under the Cable description is for calculation purposes only. Actual AWG is optional to allow manufacturing to choose an AWG that best fits the design. The shield thickness shall have a thickness of .0015 ± .0004.
Marker Tape	There shall be a marker tape under the jacket: "RAYCHEM CEC-RWC-18687 06090 A - B" 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.
Shield Coverage	92% minimum for flat shield. 85% minimum for round shield
Testing	This cable is to be tested in accordance with SPEC1200 as applicable
Jacket Color	Color white for this cable is 9X, translucent white.

Environmental properties

Flammability	Shall meet the requirements of FAR Part 25, Appendix F, Part I when tested in accordance with the 60 degree test specified therein.

Electrical properties

Voltage withstand (dielectric)	1500 volts (rms) conductor to conductor and shield 500 volts (rms) shield to shield when applicable per NEMA WC 27500. Coax components to their own SCD.
Additional Electricals	See Page 3
Jacket Flaws	Spark Test: 2.5 kV (rms). Impulse Dielectric Test: 6.0 kV (peak)

Notes

Colors	Color code designators shall be in accordance with MIL-STD-681.
Dimensions	Dimensions are in inches, and unless otherwise designated, are nominal.
Identification, Colors & Marks	The following is the key to the descriptions in the left hand view of the cable on Page 1. Line 1: Identifies the component per the components' ID list. Line 2: Color codes. Line 3: Mark on component "-" mark on component jacket.
Minimum length	Cable will be supplied in 50 ft. minimum lengths unless otherwise specified
Specification Information	This drawing is the property of Tyco Electronics, Inc. and may not be used for any purpose other than for that which it is supplied without the express written authority of Tyco Electronics, Inc.
Part Number Note	Other codes and suffixes may be added to the Part Number as necessary, to capture any additional requirements imposed by the purchase order
Nesting	Some components are nested. Their size on the drawing may be altered to reflect the effect of nesting.
Export Licence Note	The information contained on this drawing may be subject to International Traffic in Arms Regulations (ITAR) or Export Administration Regulations (EAR) controls and may not be disclosed to any foreign person or firm, including foreign persons employed by or associated with your firm, without first complying with all requirements requirement for obtaining an export license if applicable.
Trademarks	Raychem, Rayfoam, TE Connectivity, TE connectivity (logo), and TE (logo) are trademarks.

This specification sheet takes precedence over documents referenced herein.
Referenced documents shall be of the issue in effect on date of invitation to bid.
Proposed specification control drawings may be altered prior to final issue.

RCD Version 1.2 Level 1 Ser #5 RWC 8/7/95

TABLE I (Electrical Parameters)

Frequency	Insertion Loss dB/100m (typical/maximum)	RL dB/100m (min)	NEXT dB/100m (min)	Propagation Delay ns/100m (max)
1 MHz	2.2/2.8	20.0	65.3	570
4 MHz	4.5/5.5	23.0	56.3	-
8 MHz	6.2/7.8	24.5	51.8	-
10 MHz	6.8/8.7	25.0	50.3	-
16 MHz	8.5/11.1	25.0	47.3	-
20 MHz	9.8/12.5	25.0	45.8	-
25 MHz	11 /14.1	24.2	44.3	-
31.25 MHz	12.3/15.8	23.3	42.9	-
62.5 MHz	18.6/22.9	20.7	38.4	-
100 MHz	24.8/29.7	19.0	35.3	538

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

Capacitance:	13.0 pF/ft. (nominal) at 1 kHz.
Impedance:	100 ± 10 ohms at 1 to 100 MHz.
Electrical Testing:	In accordance with ANSI/TIA-568-C.2.

Raychem Wire and Cable
501 Oakside Avenue
Redwood City, CA 94063-3800
1-800-227-8816

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

TE Connectivity:

CRGCQ2010J3K3 SBCHE154R7K 2-292161-3 2005330-1 2834055-1 650075-000 ROX05SJ18R 175977-2
1969656-1 917696-1 CPF0402B37K4E1 MPT100C18RF SBCHE64R7K TE50BR39J U5254-000005-030PA
1903112-2 936348-1 RH73H2A40MKTN 1-794222-0 141991-2 2380312-2 3430B2F51RTDF 3631B101LL
1743455-2 2310537-1 SMW73R0JT 1393431-1 2377783-2 3-1393225-0 1-962915-1