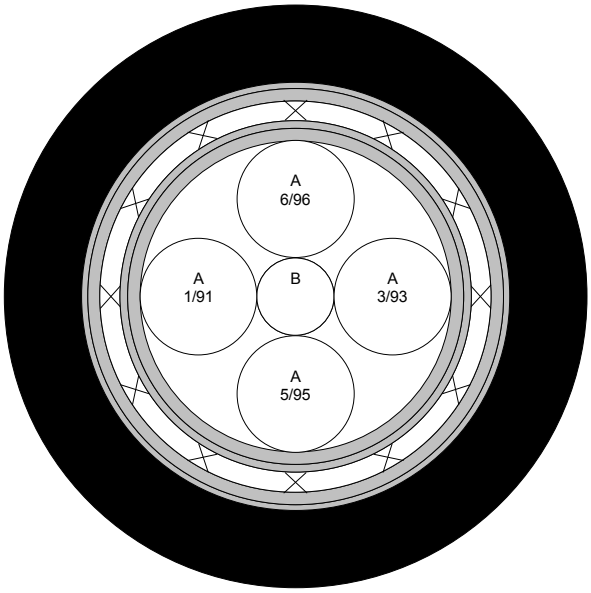
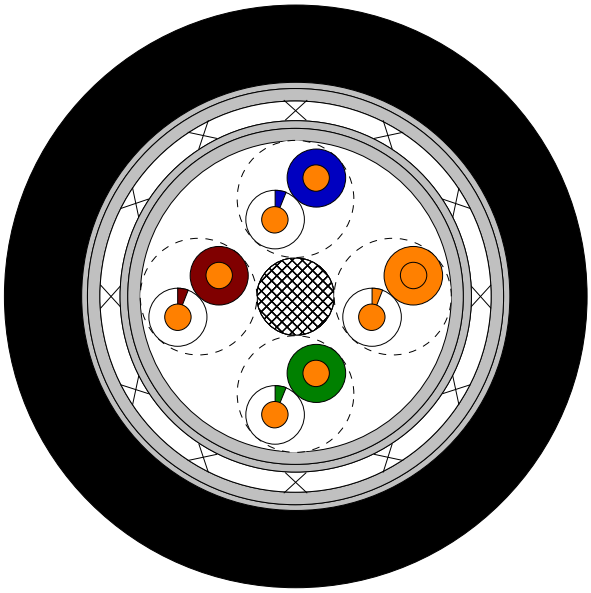
Identification, colors & marks



Cross section



Components

ID	Quantity	Part number	Description
A	4	CAT5e-24A9S	CAT5e Pair, AWG 24, solid conductor
B	1	Filler-WB-9000G	Waterblocking yarn

Cable

Outer		Description	Thickness Inches	*mm*	OD Inches	*mm*
Layer 1					0.201	*5.11*
	Wrap	Salt WB Layer	0.008	*0.20*	0.217	*5.52*
	Wrap	Aluminised poly. - alum facing out .0025	0.005	*0.13*	0.227	*5.77*
	Shield	Round tinned copper 34 awg optimized	0.013	*0.33*	0.253	*6.43*
	Wrap	Salt WB Layer	0.008	*0.20*	0.269	*6.84*
	Wrap	Moisture Barrier .002"	0.004	*0.10*	0.277	*7.04*
	Jacket	Zerohal black	0.050	*1.27*	0.377	*9.58*
Cable OD tolerance					+ 0.043	*+ 1.09*
					- 0.077	*- 1.96*

Specification	Raychem 345	
Weight	79.25 lb/kft	*118.16 Kg/Km*

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Redwood City, CA 94063-3800
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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.

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Continued

Physical properties

Watertightness	This is a watertight construction. Requirement per MIL-DTL-24643/59 in ASTM D1141 solution.
Jacket Wall	.040 inch minimum
Marker Tape	A marker tape, .10 inch wide (min) shall be placed under the moisture barrier wrap. The tape shall be marked in contrasting ink at 12 inch (max) intervals as follows: RAYCHEM-REDWOOD CITY, CA-Year of Manufacture-MIL-DTL-24643-* * = Serial Number. The serial number shall be sequential and shall not be repeated in any one calendar year for any one type and size of cable.
Shield AWG	Shield AWG is nominal to allow for changes to meet the surface transfer impedance
Components	The white component of each pair may be striped, band, or dash marked.

Electrical properties

Optimized shield	Surface transfer impedance: 700 milliohms/meter (maximum) at .1 MHz to 100 MHz, 60 dB (minimum) EMP Response per MIL-DTL-24643 on a .33 meter test sample.
Additional Electricals	See Page 3
Voltage withstand (dielectric)	1500 volts (rms) conductor to conductor and shield 500 volts (rms) shield to shield when applicable. Coax components to their own SCD.

Notes

Colors	Color code designators shall be in accordance with MIL-STD-681.
Dimensions	Dimensions are in inches, and unless otherwise designated, are nominal.
Export License 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.
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
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
Specification Information	This drawing is the property of Tyco Electronics Corporation and may not be used for any purpose other than for that which it is supplied without the express written authority of Tyco Electronics Corporation.
Trademarks	Raychem, Zerohal, TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks.
Nesting	Some components are nested. Their size on the drawing may be altered to reflect the effect of nesting.
Jacket identification	Mark: RAYCHEM LSC5OSW-4 M24643/59-04UO Year of Manufacture XLPOLYO..
Cable Type Number	MIL-DTL-24643/59 Type LSC5OSW-4

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TABLE I (Electrical Parameters)

Frequency (MHz)	Insertion Loss dB/100m (max)	Return Loss dB/100m (min)	NEXT dB/100m (min)	ACRF (ELFEXT) dB/100m (min)	PS NEXT dB/100m (min)	PSACRF (PS ELFEXT) dB/100m (min)	Propagation Delay ns/100m (max)
1.0	2.0	20.0	65.3	63.8	62.3	60.8	570
4.0	4.1	23.0	56.3	51.8	53.3	48.8	552
8.0	5.8	24.5	51.8	45.7	48.8	42.7	547
10	6.5	25.0	50.3	43.8	47.3	40.8	545
16	8.2	25.0	47.2	39.7	44.2	36.7	543
20	9.3	25.0	45.8	37.7	42.8	34.7	542
25	10.4	24.3	44.3	35.8	41.3	32.8	541
31.25	11.7	23.6	42.9	33.9	39.9	30.9	540
62.5	17.0	21.5	38.4	27.9	35.4	24.9	539
100	22.0	20.1	35.3	23.8	32.3	20.8	538

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

Capacitance:	Mutual Capacitance of a pair: 5.6 nF/100 meter (nominal) at 1 kHz. Pair to ground capacitance unbalance: 330 pF/100 meter (maximum) at 1 kHz.
Impedance:	100 ± 15 ohms at 1 to 100 MHz.
Delay Skew:	45 ns/100 meter (maximum) at 1 to 100 MHz.
Electrical Testing:	In accordance with ANSI/TIA-568-C.2.

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