

SPECIFICATION CONTROL DRAWING

55/LF0114

TITLE	WIRE, RADIATION-CROSSLINKED, MODIFIED ETFE-INSULATED, ULTRA LOW FLUORIDE, LIGHTWEIGHT, OUTER SPACE, 600 VOLT	Date	12-12-07	Revision	B
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This specification sheet forms a part of the latest issue of Raychem Specification 55/.

CONDUCTOR - SILVER-COATED HIGH STRENGTH COPPER ALLOY

INSULATION - LOW OUTGASSING, ULTRA LOW FLUORIDE, RADIATION-CROSSLINKED, MODIFIED ETFE



TABLE I. CONSTRUCTION DETAILS


PART NUMBER 1/	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	DIAMETER OF STRANDED CONDUCTOR (in.)		FINISHED WIRE		
			MINIMUM	MAXIMUM	MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft)	DIAMETER (in.)	MAXIMUM WEIGHT (lbs/1000 ft.)
55/LF0114-30-*	30	7 x 38	.011	.012	117.4	.024 ± .002	.66
55/LF0114-28-*	28	7 x 36	.014	.016	74.4	.027 ± .002	.91
55/LF0114-26-*	26	19 x 38	.018	.020	44.8	.032 ± .002	1.4
55/LF0114-24-*	24	19 x 36	.023	.025	28.4	.037 ± .002	2.0
55/LF0114-22-*	22	19 x 34	.029	.031	17.5	.043 ± .002	2.9
55/LF0114-20-*	20	19 x 32	.037	.039	10.7	.050 ± .002	4.4
55/LF0114-18-*	18	19 x 30	.046	.050	6.8	.060 ± .002	6.5
55/LF0114-16-*	16	19 x 29	.052	.057	5.3	.068 ± .002	8.3

TABLE II. PERFORMANCE DETAILS

PART NUMBER 1/	BEND TESTING	
	MANDREL DIAMETER (inch) (± 3%)	WEIGHT (lb) (± 3%)
	CROSSLINK VERIFICATION	CROSSLINK VERIFICATION
55/LF0114-30-*	.250	.125
55/LF0114-28-*	.250	.125
55/LF0114-26-*	.375	.125
55/LF0114-24-*	.375	.250
55/LF0114-22-*	.500	.375
55/LF0114-20-*	.500	.500
55/LF0114-18-*	.500	.500
55/LF0114-16-*	.750	.750

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice. Tyco Electronics also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

1/ COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681. OTHER CODES AND SUFFIXES MAY BE ADDED TO THE PART NUMBER. AS NECESSARY, TO CAPTURE ANY ADDITIONAL REQUIREMENTS IMPOSED BY THE PURCHASE ORDER.

Page 1 of 2	The TE logo, Tyco Electronics and Raychem are trademarks.		Raychem Wire & Cable 501 Oakside Avenue Redwood City, CA 94063-3800 Phone: 1-800-227-8816 Fax: 1-650-361-6297
	DIMENSIONS ARE IN INCHES, AND UNLESS OTHERWISE DESIGNATED ARE NOMINAL		
	THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.		

WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 200°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms) at sea level

CROSSLINK VERIFICATION: 300 ± 3°C for 1 hour

COLOR: White preferred

FLUORIDE EXTRACTION: 70 ± 2° C for 168 hours, 20 ppm (maximum)

IDENTIFICATION AND COLOR STRIPING DURABILITY:

125 cycles (250 strokes) (minimum), 500 g weight

INSULATION ELONGATION: 50% (minimum)

INSULATION FLAWS:

Spark Test, 3.0 kV (rms)

Impulse Dielectric Test, 8.0 kV (peak)

INSULATION THICKNESS: 0.005 in. (minimum)

RADIATION RESISTANCE: 500 megarads

SHRINKAGE: 230 ± 3°C for 1 hour, 0.125 in. (maximum) in 12 in.

VACUUM STABILITY:

Total Mass Loss (TML), 1.00% (maximum)

Volatile Condensable Material, 0.10% (maximum)

VOLTAGE WITHSTAND TEST (Post Environmental): 2500 volts (rms), 60 Hz, 5 minutes

PART NUMBER:

The "*" in the part numbers on page 1 shall be replaced by a color code designator.

1/ Example: AWG 22, white: 55/LF0114-22-9

AWG 22, white with black stripe: 55/LF0114-22-90

1/ See footer section on page 1