

# SPECIFICATION CONTROL DRAWING

55/0112

TITLE	WIRE, RADIATION-CROSSLINKED, MODIFIED ETFE-INSULATED, LIGHTWEIGHT, GENERAL PURPOSE, OUTER SPACE, 600 VOLT	Date	4-30-13	Revision	H
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This specification sheet forms a part of the latest issue of Raychem Specification 55/.

CONDUCTOR - SILVER-COATED COPPER

INSULATION - LOW OUTGASSING, 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.)
55/0112-30-*	30	7 x 38	.011	.012	100.7	.024 ± .002	.66
55/0112-28-*	28	7 x 36	.014	.015	63.8	.027 ± .002	.91
55/0112-26-*	26	19 x 38	.018	.019	38.4	.032 ± .002	1.4
55/0112-24-*	24	19 x 36	.023	.025	24.3	.037 ± .002	2.0
55/0112-22-*	22	19 x 34	.029	.030	15.1	.043 ± .002	2.8
55/0112-20-*	20	19 x 32	.037	.039	9.19	.050 ± .002	4.3
55/0112-18-*	18	19 x 30	.046	.048	5.79	.060 ± .002	6.5
55/0112-16-*	16	19 x 29	.052	.054	4.52	.068 ± .002	8.3
55/0112-14-*	14	19 x 27	.065	.068	2.88	.085 ± .003	13.0
55/0112-12-*	12	37 x 28	.084	.087	1.90	.103 ± .003	19.7
55/0112-10-*	10	37 x 26	.106	.112	1.19	.128 ± .006	32.3
55/0112-8-*	8	133 x 29	.158	.169	.658	.188 ± .008	60.5

TABLE II. PERFORMANCE DETAILS

PART NUMBER 1/	BEND TESTING	
	MANDREL DIAMETER (inch) (± 3%)	WEIGHT (lb) (± 3%)
	CROSSLINKED VERIFICATION	CROSSLINKED VERIFICATION
55/0112-30-*	.250	.125
55/0112-28-*	.250	.125
55/0112-26-*	.375	.125
55/0112-24-*	.375	.250
55/0112-22-*	.500	.375
55/0112-20-*	.500	.500
55/0112-18-*	.500	.500
55/0112-16-*	.750	.750
55/0112-14-*	1.00	1.00
55/0112-12-*	1.50	1.50
55/0112-10-*	2.00	1.50
55/0112-8-*	3.00	4.00

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice. Tyco Electronics Corporation 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.

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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.



Raychem Wire & Cable  
501 Oakside Avenue  
Redwood City, CA 94063-3800  
Phone: 1-800-227-8816  
Fax: 1-650-361-6297

## WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 200°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms) at sea level

COLOR: White preferred

CROSSLINKED VERIFICATION: 300 ± 3°C for 1 hour

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 inches

VACUUM STABILITY:

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

Volatile Condensable Material, 0.10% (maximum)

VOLTAGE WITHSTAND (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: 55/0112-22-9

AWG 22, White with black stripe: 55/0112-22-90

1/ See footer section on page 1