## SPECIFICATION CONTROL DRAWING

55/0111

TITLE

WIRE, RADIATION-CROSSLINKED, MODIFIED ETFE INSULATED, LIGHTWEIGHT, OUTER SPACE, 600 VOLT

Date 7-21-06

Revision

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This specification sheet forms a part of the latest issue of Raychem Specification 55/.

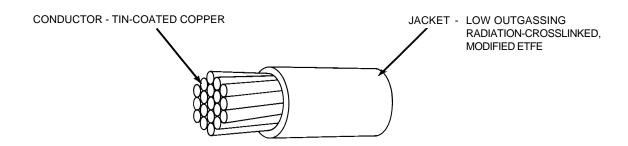


TABLE I. CONSTRUCTION DETAILS								
	DIAMETER OF		TER OF	FINISHED WIRE				
PART NUMBER <u>1</u> /	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	STRANDED CONDUCTOR (in.)		MAXIMUM RESISTANCE AT 20°C	DIAMETER (in.)	MAXIMUM WEIGHT (lb/1000 ft)	
			MINIMUM	MAXIMUM	(ohms /1000 ft.)		(	
55/0111-26-*	26	19 x 38	.018	.020	41.3	$.032 \pm .002$	1.4	
55/0111-24-*	24	19 x 36	.023	.025	26.2	$.037 \pm .002$	2.0	
55/0111-22-*	22	19 x 34	.029	.031	16.2	$.043 \pm .002$	2.8	
55/0111-20-*	20	19 x 32	.037	.039	9.88	$.050 \pm .002$	4.3	
55/0111-18-*	18	19 x 30	.046	.049	6.23	$.060 \pm .002$	6.5	
55/0111-16-*	16	19 x 29	.052	.055	4.81	.068 ± .002	8.3	
55/0111-14-*	14	19 x 27	.065	.069	3.06	.085 ± .003	13.0	
55/0111-12-*	12	37 x 28	.084	.089	2.02	.103 ± .003	19.7	

TABLE II. PERFORMANCE DETAILS						
	BEND TESTING					
PART NUMBER	MANDREL DIAMETER (inch) (± 3%)	WEIGHT (lb) (± 3%)				
1/	CROSSLINK VERIFICATION	CROSSLINK VERIFICATION				
55/0111-26-*	.375	.125				
55/0111-24-*	.375	.250				
55/0111-22-*	.500	.375				
55/0111-20-*	.500	.500				
55/0111-18-*	.500	.500				
55/0111-16-*	.750	.750				
55/0111-14-*	1.00	1.00				
55/0111-12-*	1.50	1.50				

## WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature VOLTAGE RATING: 600 volts (rms) at sea level CROSSLINK VERIFICATION:  $300 \pm 3^{\circ}$ C for 1 hour

COLOR: White preferred

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)

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Impulse Dielectric Test, 8.0 kV (peak) INSULATION THICKNESS: .005 in. (minimum)

RADIATION RESISTANCE: 500 megarads

SHRINKAGE:  $230 \pm 3^{\circ}$ C for 1 hour, 0.125 in. (maximum) in 12 in.

VACUUM STABILITY:

Total Mass Loss (TML), 1.0% (maximum) Volatile Condensable Material, 0.1% (maximum) VOLTAGE WITHSTAND TEST (Post Environmental):

2500 volts (rms), 60 Hz, 5 minutes

## PART NUMBER:

The "\*" in the part numbers above shall be replaced by

color code designators.

1/ Example: AWG 20, white: 55/0111-20-9

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.

15 IMPOSED BY THE PURCHASE ORDER

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.



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