## SPECIFICATION CONTROL DRAWING 55A8000 TITLE WIRE, RADIATION-CROSSLINKED, MODIFIED ETFE-INSULATED, THERMOCOUPLE EXTENSION, NORMAL WEIGHT Date 9-21-12 Revision

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

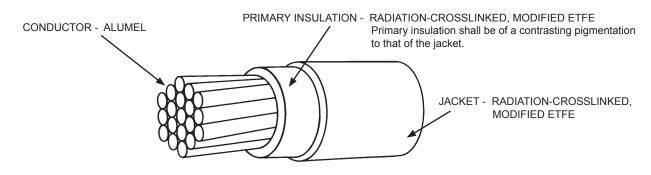


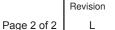
TABLE I. CONSTRUCTION DETAILS									
PART NUMBER 1/	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	DIAMETER OF STRANDED CONDUCTOR (in.)		FINISHED WIRE				
					DIAMETER (in.)	MAXIMUM WEIGHT			
			NOMINAL	MAXIMUM	(111.)	(lbs/1000 ft.)			
55A8000-30-*	30	7 x 38	.012		.032 ± .002	.97			
55A8000-26-*	26	7 x 34	.019		.040 ± .002	1.7			
55A8000-24-*	24	19 x 36		.026	.045 ± .002	2.4			
55A8000-22-*	22	19 x 34		.033	.051 ± .003	3.4			
55A8000-20-*	20	19 x 32		.041	.059 ± .003	5.0			
55A8000-18-*	18	19 x 30		.051	.070 ± .003	7.3			
55A8000-16-*	16	19 x 29		.058	.078 ± .004	9.4			

TABLE II. PERFORMANCE DETAILS								
PART NUMBER	BEND TESTING							
	MANDREL DIAI (inch) (± 30		WEIGHT (lb) (± 3%)					
	ACCELERATED AGING	COLD BEND	ACCELERATED AGING	COLD BEND				
55A8000-30-*	.375	1.00	.250	2.00				
55A8000-26-*	.500	1.00	.750	3.00				
55A8000-24-*	.500	1.00	.750	3.00				
55A8000-22-*	.500	1.00	1.00	3.00				
55A8000-20-*	.500	1.00	1.50	4.00				
55A8000-18-*	.750	1.50	2.00	4.00				
55A8000-16-*	1.00	1.50	2.00	5.00				

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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.						
Page 1 of 2	Alumel, Chromel, Raychem, TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks.		Raychem Wire & Cable			
	DIMENSIONS ARE IN INCHES, AND UNLESS OTHERWISE DESIGNATED ARE NOMINAL.		501 Oakside Avenue Redwood City, CA 94063-3800 Phone: 1-800-227-8816 Fax: 1-650-361-6297			
	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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## WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 200°C Maximum continuous conductor temperature ACCELERATED AGING (CROSSLINKING PROOF): 300 ± 3°C for 7 hours CONCENTRICITY: 70% (minimum) FLAMMABILITY (Qualification Test): Procedure 1, 3 seconds (maximum); 3 in. (maximum); no flaming of facial tissue IDENTIFICATION AND COLOR STRIPING DURABILITY (AWG 24 - 16 only): 125 cycles (250 strokes) (minimum), 500 g weight INSULATION ELONGATION AND TENSILE STRENGTH: Elongation, 50% (minimum) Tensile Strength, 5000 lbf/in<sup>2</sup> (minimum) **INSULATION FLAWS:** Primary Insulation, Spark Test, 1.5 kV (rms) Finished Wire, Spark Test, 5.7 kV (rms) at 3 kHz Impulse Dielectric Test, 8.0 kV (peak) INSULATION RESISTANCE: 5000 megohms for 1000 ft (minimum) INSULATION THICKNESS: 0.008 in. (minimum), total both layers LOW TEMPERATURE-COLD BEND (Qualification Test): -65 ± 2°C for 4 hours SHRINKAGE: 230 ± 3°C for 6 hours, 0.125 in. (maximum) in 12 in. VOLTAGE WITHSTAND TEST (Post Environmental): 2500 volts (rms), 60 Hz WICKING: 2.25 in. (maximum)

## PART NUMBER:

The "\*" in the part numbers on page 1 shall be replaced by one of the color code designators shown below. 1/ Example: AWG 24,

Per MIL-STD-687: green, 55A8000-24-5 Per ANSI MC96.1: red, 55A8000-24-2 Per British Standard Code BS: blue, 55A8000-24-6 Per International Standard IEC 584-3: white, 55A8000-24-9

EMF with known standard CHROMEL shall be 4.00 mV (minimum), 4.19 mV (maximum), at 100°C with reference junction corrected to 0°C per ANSI MC96.1.

1/ See footer section on page 1