SPECIFICATION CONTROL DRAWING

55A8001

TITLE	Date	Revision
WIRE, RADIATION-CROSSLINKED, MODIFIED ETFE-INSULATED, THERMOCOUPLE EXTENSION, NORMAL WEIGHT	9-21-12	M

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

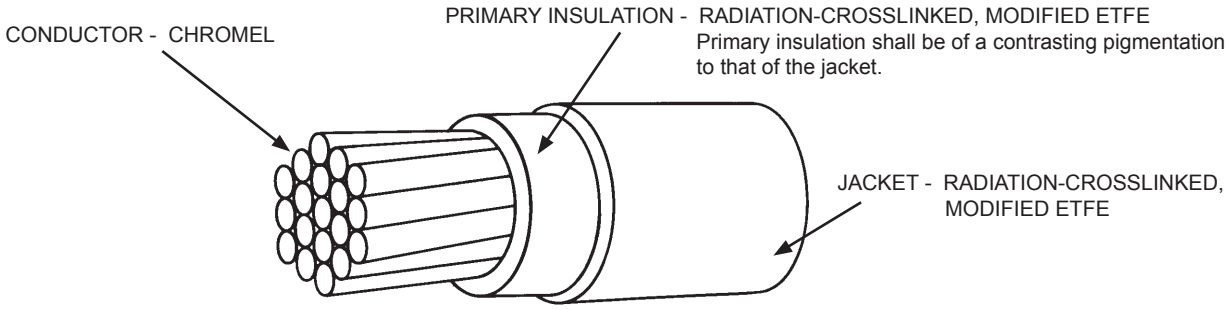

TABLE I. CONSTRUCTION DETAILS

PART NUMBER 1/	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	DIAMETER OF STRANDED CONDUCTOR (in.)		FINISHED WIRE	
			NOMINAL	MAXIMUM	DIAMETER (in.)	MAXIMUM WEIGHT (lbs/1000 ft.)
55A8001-30-*	30	7 x 38	.012	----	.032 ± .002	.98
55A8001-26-*	26	7 x 34	.019	----	.040 ± .002	1.8
55A8001-24-*	24	19 x 36	-----	.026	.045 ± .002	2.5
55A8001-22-*	22	19 x 34	----	.033	.051 ± .003	3.4
55A8001-20-*	20	19 x 32	----	.041	.059 ± .003	5.0
55A8001-18-*	18	19 x 30	----	.051	.070 ± .003	7.3
55A8001-16-*	16	19 x 29	----	.058	.078 ± .004	9.4

TABLE II. PERFORMANCE DETAILS

PART NUMBER 1/	BEND TESTING			
	MANDREL DIAMETER (inch) (± 3%)		WEIGHT (lb) (± 3%)	
	ACCELERATED AGING	COLD BEND	ACCELERATED AGING	COLD BEND
55A8001-30-*	.375	1.00	.250	2.00
55A8001-26-*	.500	1.00	.750	3.00
55A8001-24-*	.500	1.00	.750	3.00
55A8001-22-*	.500	1.00	1.00	3.00
55A8001-20-*	.500	1.00	1.50	4.00
55A8001-18-*	.750	1.50	2.00	4.00
55A8001-16-*	1.00	1.50	2.00	5.00

CHROMEL and ALUMEL are federally registered trademarks of Hoskins Manufacturing Company. Alternative conductors, exhibiting the same performance characteristics, may be substituted for one or both of the CHROMEL and ALUMEL conductors.

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.

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
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/in² (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: white, 55A8001-24-9
Per ANSI MC96.1: yellow, 55A8001-24-4 or
purple, 55A8001-24-7
Per British Standard Code BS: brown, 55A8001-24-1
Per International Standard IEC 584-3: green, 55A8001-24-5

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

EMF with known standard Constantan shall be 6.21 mV (minimum), 6.43 mV (maximum), at 100°C with reference junction corrected to 0°C per ANSI MC96.1.

1/ See footer section on page 1