

# SPECIFICATION CONTROL DRAWING

55/031A

TITLE	WIRE, RADIATION-CROSSLINKED, MODIFIED ETFE-INSULATED, LIGHTWEIGHT, OUTER SPACE, 600 VOLT	Date	5-21-09	Revision	H
This specification sheet forms a part of the latest issue of Raychem Specification 55/.					

CONDUCTOR - SILVER-COATED ULTRA HIGH STRENGTH COPPER ALLOY

JACKET - LOW OUTGASSING RADIATION-CROSSLINKED, MODIFIED ETFE

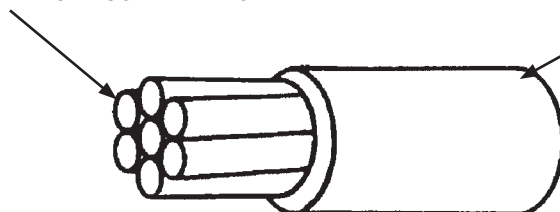


TABLE I. CONSTRUCTION DETAILS

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.)
55/031A-32-*	32	7 x 40	.0089	.0096	262.	.0173 ± .0011	.37
55/031A-30-*	30	7 x 38	.0116	.0123	156.	.0200 ± .0011	.54
55/031A-28-*	28	7 x 36	.0146	.0153	98.7	.0230 ± .0011	.77
55/031A-26-*	26	19 x 38	.0188	.0200	57.5	.0275 ± .0012	1.25

TABLE II. PERFORMANCE DETAILS

PART NUMBER 1/	BEND TESTING	
	MANDREL DIAMETER (inch) (± 3%)	WEIGHT (lb) (± 3%)
	CROSSLINK VERIFICATION	CROSSLINK VERIFICATION
55/031A-32-*	.125	.063
55/031A-30-*	.250	.063
55/031A-28-*	.250	.063
55/031A-26-*	.375	.063

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.

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

CROSSLINKING VERIFICATION: 300 ± 3°C for 1 hour

COLOR: White preferred

CONCENTRICITY: 80% (minimum)

IDENTIFICATION AND COLOR STRIPING DURABILITY:

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

INSULATION ELONGATION: 50% (minimum)

INSULATION FLAWS:

Spark Test, 1.5 kV (rms)

Impulse Dielectric Test, 6.0 kV (peak)

INSULATION THICKNESS: .004 in. (nominal)

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 (VCM), 0.10% (maximum)

VOLTAGE WITHSTAND TEST (Post Environmental): 1500 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 30, white; 55/031A-30-9

1/ See footer section on page 1