## **SPECIFICATION CONTROL DRAWING**

55/031A

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

Date 5-21-09

Revision

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

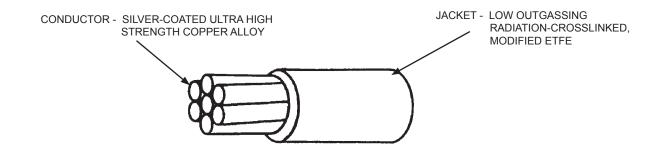


TABLE I. CONSTRUCTION DETAILS									
PART NUMBER 1/	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	DIAMETER OF STRANDED CONDUCTOR (in.)		FINISHED WIRE				
					MAXIMUM RESISTANCE AT 20°C	DIAMETER (in.)	MAXIMUM WEIGHT		
			MINIMUM	MAXIMUM	(ohms/1000 ft.)	(/)	(lbs/1000 ft.)		
55/031A-32-*	32	7 x 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							
	BEND TESTING						
PART NUMBER 1/	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

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.

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## 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 DielectricTest, 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.  $\underline{1}$ / Example: AWG 30, white; 55/031A-30-9

1/ See footer section on page 1