

SPECIFICATION CONTROL DRAWING

55/0314

TITLE	WIRE, RADIATION-CROSSLINKED MODIFIED ETFE INSULATED, ULTRA LIGHTWEIGHT, OUTER SPACE, 600 VOLT	Date	2-2-06	Revision	G
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This specification sheet forms a part of the latest issue of Raychem Specification 55/.

CONDUCTOR - SILVER-COATED 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/1000ft.)	DIAMETER (in.)	MAXIMUM WEIGHT (lbs/1000 ft.)
55/0314-30-*	30	7 x 38	.0110	.0120	117.	.0195 ± .0015	.56
55/0314-28-*	28	7 x 36	.0140	.0150	74.4	.0225 ± .0015	.81
55/0314-26-*	26	19 x 38	.0175	.0191	44.8	.0274 ± .0017	1.23
55/0314-24-*	24	19 x 36	.0225	.0241	28.4	.0322 ± .0017	1.79
55/0314-22-*	22	19 x 34	.0285	.0301	17.5	.0390 ± .0017	2.70
55/0314-20-*	20	19 x 32	.0365	.0385	10.7	.0495 ± .0017	4.27

TABLE II. PERFORMANCE DETAILS

PART NUMBER 1/	BEND TESTING	
	MANDREL DIAMETER (inch) (± 3%)	WEIGHT (lb) (± 3%)
	CROSSLINK VERIFICATION	CROSSLINK VERIFICATION
55/0314-30-*	.250	.063
55/0314-28-*	.250	.063
55/0314-26-*	.375	.063
55/0314-24-*	.375	.125
55/0314-22-*	.500	.188
55/0314-20-*	.500	.250

WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 200°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms) at sea level

CROSSLINK 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), (30 - 24 AWG)

3.0 kV(rms), (22 AWG & larger)

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 in.

VACUUM STABILITY:

Total Mass Loss (TML), 1.0% (maximum)

Volatile Condensable Material (VCM), 0.1% (maximum)

VOLTAGE WITHSTAND TEST (POST ENVIRONMENTAL):

1500 volts (rms), 60 Hz, 5 minutes

PART NUMBER:

The "*" in the part numbers above shall be replaced
by a color code designator.

1/ Example: AWG 28, white: 55/0314-28-9

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.

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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.