

SPECIFICATION CONTROL DRAWING

55/0114

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

Date 2-28-05

Revision E

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

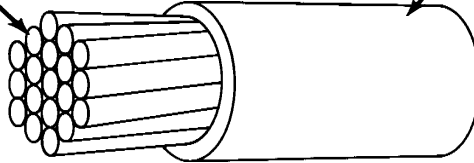


TABLE I. CONSTRUCTION DETAILS

PART NUMBER <u>1/</u>	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 (lb/1000 ft)
55/0114-30-*	30	7 x 38	.011	.012	117.4	.024 ± .002	.66
55/0114-28-*	28	7 x 36	.014	.016	74.4	.027 ± .002	.91
55/0114-26-*	26	19 x 38	.018	.020	44.8	.032 ± .002	1.4
55/0114-24-*	24	19 x 36	.023	.025	28.4	.037 ± .002	2.0
55/0114-22-*	22	19 x 34	.029	.031	17.5	.043 ± .002	2.9
55/0114-20-*	20	19 x 32	.037	.039	10.7	.050 ± .002	4.4
55/0114-18-*	18	19 x 30	.046	.050	6.8	.060 ± .002	6.5
55/0114-16-*	16	19 x 29	.052	.057	5.3	.068 ± .002	8.3

TABLE II. PERFORMANCE DETAILS

PART NUMBER <u>1/</u>	BEND TESTING	
	MANDREL DIAMETER (inch) (± 3%)	WEIGHT (lb) (± 3%)
	CROSSLINK VERIFICATION	CROSSLINK VERIFICATION
55/0114-30-*	.250	.125
55/0114-28-*	.250	.125
55/0114-26-*	.375	.125
55/0114-24-*	.375	.250
55/0114-22-*	.500	.375
55/0114-20-*	.500	.500
55/0114-18-*	.500	.500
55/0114-16-*	.750	.750

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

IDENTIFICATION AND COLOR STRIPING DURABILITY:

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

INSULATION ELONGATION: 50% (minimum)

INSULATION FLAWS:

Spark Test, 3.0 kV (rms)

Impulse Dielectric Test, 8.0 kV (peak)

INSULATION THICKNESS: .005 in. (minimum)

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)

Volatiles Condensable Material, 0.1% (maximum)

VOLTAGE WITHSTAND TEST (Post Environmental):

2500 volts (rms), 60 Hz, 5 minutes

PART NUMBER:

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

1/ Example: AWG 20, white: 55/0114-20-9

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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