SPECIFICATION CONTROL DRAWING

SCD **55/0312**

Title: WIRE, RADIATION-CROSSLINKED, MODIFIED ETFE-INSULATED, ULTRA LIGHTWEIGHT, OUTER SPACE, 600 VOLT

Date: 6-6-17

Revision: K

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

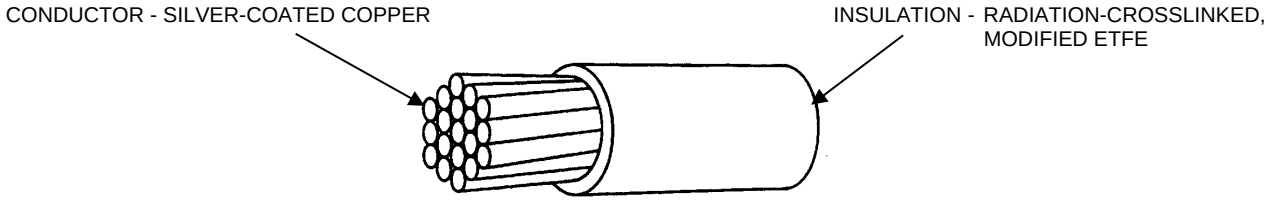


TABLE I. CONSTRUCTION DETAILS

PART NUMBER 1/	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	DIAMETER OF STRANDED CONDUCTOR (inch)		FINISHED WIRE		
			MINIMUM	MAXIMUM	MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.)	DIAMETER (inch)	MAXIMUM WEIGHT (lbs/1000 ft.)
55/0312-30-*	30	7 x 38	.0110	.0120	100.7	.0195 ± .0015	.52
55/0312-28-*	28	7 x 36	.0140	.0150	63.8	.0225 ± .0015	.76
55/0312-26-*	26	19 x 38	.0175	.0191	38.4	.0274 ± .0017	1.22
55/0312-24-*	24	19 x 36	.0225	.0241	24.3	.0322 ± .0017	1.79
55/0312-22-*	22	19 x 34	.0285	.0301	15.1	.0390 ± .0017	2.70
55/0312-20-*	20	19 x 32	.0365	.0385	9.19	.0495 ± .0017	4.27
55/0312-18-*	18	19 x 30	.0452	.0476	5.79	.0590 ± .0017	6.56
55/0312-16-*	16	19 x 29	.0514	.0538	4.52	.0665 ± .0019	8.33
55/0312-14-*	14	19 x 27	.0644	.0674	2.88	.0810 ± .0021	12.81
55/0312-12-*	12	37 x 28	.0825	.0865	1.90	.1000 ± .0026	19.71
55/0312-10-*	10	37 x 26	.1050	.1090	1.19	.1260 ± .0040	31.70

TABLE II. PERFORMANCE DETAILS

PART NUMBER 1/	CROSSLINKED VERIFICATION - BEND TESTING	
	MANDREL DIAMETER (inch) (± 3%)	WEIGHT (lb) (± 3%)
55/0312-30-*	.250	.063
55/0312-28-*	.250	.063
55/0312-26-*	.375	.063
55/0312-24-*	.375	.125
55/0312-22-*	.500	.188
55/0312-20-*	.500	.250
55/0312-18-*	.500	.250
55/0312-16-*	.750	.375
55/0312-14-*	1.00	.500
55/0312-12-*	1.50	.750
55/0312-10-*	2.00	.750

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice.
TE Connectivity 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.

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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
COLOR: White preferred
CONCENTRICITY: 80% (minimum)
CROSSLINKED VERIFICATION: 300 ± 3°C for 1 hour
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) (22-10 AWG)
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 (Post Environmental): 1500 volts (rms), 60 Hz, 5 minutes

1/ PART NUMBER:
The "*" in the part numbers in Tables I and II shall be replaced by a color code designator.
Example: AWG 20, white: 55/0312-20-9
AWG 20, white with a black stripe: 55/0312-20-90

1/ See footer section on page 1

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