

SPECIFICATION CONTROL DRAWING

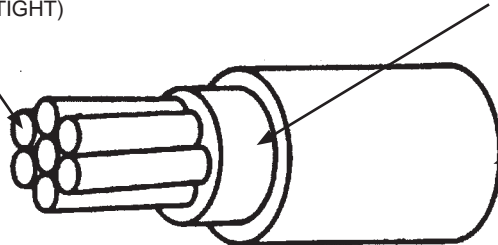
44A9605

TITLE	WIRE, RADIATION-CROSSLINKED, POLYALKENE-INSULATED, LIGHTWEIGHT, GENERAL PURPOSE, WATERTIGHT, 600 VOLT	Date	9-23-13	Revision	J
This specification sheet forms a part of the latest issue of Raychem Specification 44.					

CONDUCTOR - TIN-COATED COPPER
(WATERTIGHT)

PRIMARY INSULATION - RADIATION-CROSSLINKED,
EXTRUDED POLYALKENE

JACKET - RADIATION-CROSSLINKED,
MODIFIED PVDF
Thickness: .005 ± .001 in.

**TABLE I. CONSTRUCTION DETAILS**

PART NUMBER 1/	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG) (number x SEOD)	NOMINAL DIAMETER OF STRANDED CONDUCTOR (inch)	FINISHED WIRE		
				MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft)	DIAMETER (inch)	MAXIMUM WEIGHT (lbs/1000 ft.)
44A9605-20-*	20	7 x 28	.038	10.9	.078 ± .003	6.2
44A9605-18-*	18	7 x 26	.048	6.87	.088 ± .003	8.8
44A9605-16-*	16	7 x .0192	.058	4.33	.097 ± .004	11.7
44A9605-14-*	14	7 x .0242	.073	2.78	.115 ± .004	17.7

TABLE II. PERFORMANCE DETAILS

PART NUMBER 1/	BEND TESTING				
	MANDREL DIAMETER (inch) (± 3%)			WEIGHT (lb) (± 3%)	
	IMMERSION, LIFE CYCLE, AND ACCELERATED AGING	COLD BEND	WRAP	IMMERSION, LIFE CYCLE, AND ACCELERATED AGING	COLD BEND
44A9605-20-*	.750	2.00	.250	.500	1.00
44A9605-18-*	1.00	3.00	.500	.500	1.00
44A9605-16-*	1.00	3.00	.500	.500	1.00
44A9605-14-*	1.50	4.00	.500	.500	3.00

WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 135°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms) at sea level

ACCELERATED AGING: 225 ± 2°C for 6 hours

Identification legibility, 225 ± 2°C for 6 hours

INSULATION RESISTANCE:

5000 megohms for 1000 ft. (minimum)

LOW TEMPERATURE-COLD BEND: -55 ± 2°C for 4 hours

SHRINKAGE: 225 ± 2°C, 0.125 in. (maximum) in 12 inches

THERMAL SHOCK: Not Applicable

WATERTIGHTNESS: Test per MIL-DTL-24640 with a pressurization time of 5 minutes. No water leakage when tested on a 5-inch length at 2.2 lbf/in² and on a 10-inch length at 5.8 lbf/in².

1/ PART NUMBER:

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

Example: AWG 18, white: 44A9605-18-9

Except as specified above, this construction shall meet all requirements of Raychem Specification Sheet 44A0311.

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice.
Tyco Electronics Corporation 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.



Raychem Wire & Cable
501 Oakside Avenue
Redwood City, CA 94063-3800
Phone: 1-800-227-8816
Fax: 1-650-361-6297