## SPECIFICATION CONTROL DRAWING WIRE, RADIATION-CROSSLINKED, MODIFIED POLYALKENE-INSULATED, WATERTIGHT, 600 VOLT K 44A9586

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: .003 ± .001 in.

TABLE I. CONSTRUCTION DETAILS								
PART NUMBER 1/	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	NOMINAL DIAMETER OF STRANDED CONDUCTOR (in.)	FINISHED WIRE				
				MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft)	DIAMETER (in.)	MAXIMUM WEIGHT (lbs/1000 ft.)		
44A9586-26-*	26	7 x 34	.019	45.2	.034 ± .002	1.4		
44A9586-24-*	24	7 x 32	.024	26.6	.041 ± .002	2.1		
44A9586-22-*	22	7 x 30	.030	17.5	.048 ± .002	3.1		
44A9586-20-*	20	7 x 28	.038	10.9	.056 ± .002	4.6		
44A9586-18-*	18	7 x 26	.048	6.87	.066 ± .002	7.1		

TABLE II. PERFORMANCE DETAILS								
PART NUMBER 1/	BEND TESTING							
		L DIAMETER ) (± 3%)	WEIGHT (lb) (± 3%)					
	IMMERSION, LIFE CYCLE AND ACCELERATED AGING	COLD BEND	WRAP	IMMERSION, LIFE CYCLE AND ACCELERATED AGING	COLD BEND			
44A9586-26-*	.500	.500	.250	.125	.500			
44A9586-24-*	.500	.500	.250	.190	.500			
44A9586-22-*	.750	.750	.250	.190	1.00			
44A9586-20-*	.750	.750	.250	.190	1.00			
44A9586-18-*	1.00	1.00	.375	.250	1.00			

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.



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## 44A9586

## ADDITIONAL REQUIREMENTS

ACCELERATED AGING: 250 ± 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: -40  $\pm$  2°C for 4 hours SHRINKAGE: 250  $\pm$  2°C, 0.125 in. (maximum) in 12 inches

SOLDERABILITY: Not Applicable

WATERTIGHTNESS: Per MIL-DTL-24640, with limits per Table III:

TABLE III. WATERTIGHTNESS				
PART NUMBER <u>1</u> /	LIMIT (in³) (maximum)			
44A9586-26	2			
44A9586-24	2			
44A9586-22	3			
44A9586-20	4			
44A9586-18	4			

Except as specified above and on page 1, this construction shall meet all requirements of Raychem Specification Sheet 44A0111.

## PART NUMBER:

The "\*" in the part numbers on page 1 shall be replaced by a color code designator. 1/ Example: AWG 20, white: 44A9586-20-9

1/ See footer section on page 1