## **SPECIFICATION CONTROL DRAWING**

44A123X

Е

TITLE THREE CONDUCTOR CABLE, SHIELDED, JACKETED, GENERAL PURPOSE, 1000 VOLT

5-5-08

Revision

This specification sheet forms a part of the latest issue of Raychem Specification 44.

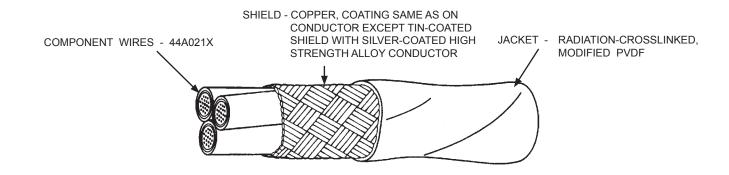


TABLE I. CABLE CONSTRUCTION DETAILS									
PART NUMBER 1/	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (in.)		OUTSIDE DIAMETER (in.)		MAXIMUM WEIGHT		
			MINIMUM	NOMINAL	NOMINAL	MAXIMUM	(lbs/1000 ft.)		
44A123X-26-*	26	36	.006	.008	.123	.130	13.3		
44A123X-24-*	24	36	.006	.008	.136	.143	16.8		
44A123X-22-*	22	36	.006	.008	.154	.161	21.6		
44A123X-20-*	20	36	.007	.009	.173	.182	28.4		
44A123X-18-*	18	36	.007	.009	.197	.207	38.4		
44A123X-16-*	16	36	.007	.009	.214	.225	46.3		
44A123X-14-*	14	36	.007	.009	.251	.263	64.4		
44A123X-12-*	12	36	.008	.010	.294	.308	91.4		
44A123X-10-*	10	36	.008	.010	.356	.374	138.		
44A123X- 8-*	8	34	.010	.012	.495	.520	240.		
44A123X- 6-*	6	34	.010	.012	.599	.629	351.		

NOTE: Nominal values are for information only. Nominal values are not requirements.

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. HOWEVER, DUE TO LENGTH LIMITATIONS OF THE RAYCHEM PART NUMBER, AN ALTERNATIVE COLOR CODE MAY REPLACE MIL-STD-681 COLOR CODE DESIGNATORS. (EXAMPLE: "901/902..." MAY BE REPLACED BY "AXXX".) 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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### SPECIFICATION CONTROL DRAWING

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Revision SCD

44A123X

TABLE II. CABLE PERFORMANCE DETAILS								
PART NUMBER 1/	BEND TESTING							
	MANDREL DIAMETE (inch) (±3%)	ĒR	WEIGHT (lb) (±3%)					
	LIFE CYCLE, IMMERSION AND ACCELERATED AGING	COLD BEND	LIFE CYCLE, IMMERSION AND ACCELERATED AGING	COLD BEND				
44A123X-26-*	3.00	3.00	.563	4.50				
44A123X-24-*	6.00	6.00	.563	9.00				
44A123X-22-*	6.00	6.00	.563	9.00				
44A123X-20-*	6.00	6.00	.750	13.5				
44A123X-18-*	6.00	6.00	.750	13.5				
44A123X-16-*	6.00	6.00	1.50	18.0				
44A123X-14-*	10.0	10.0	1.50	18.0				
44A123X-12-*	10.0	10.0	2.25	18.0				
44A123X-10-*	10.0	10.0	3.00	18.0				
44A123X- 8-*	18.0	18.0	4.50	22.5				
44A123X- 6-*	18.0	18.0	4.50	36.0				

#### CABLE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature VOLTAGE RATING: 1000 volts (rms) at sea level ACCELERATED AGING: 300 ± 3°C for 6 hours

BLOCKING: 150 ± 3°C for 6 hours

DIELECTRIC WITHSTAND: 3000 volts (rms), 60 Hz, 1 minute

FLAMMABILITY:

30 seconds (maximum); 3 in. (maximum); no flaming of facial tissue

IMMERSION: Diameter increase 5% (maximum),

no cracking, no dielectric breakdown JACKET COLOR: White preferred

JACKET CONCENTRICITY: 70% (minimum)

JACKET ELONGATION AND TENSILE STRENGTH:

Elongation, 200% (minimum)

Tensile Strength, 4000 lbf/in2 (minimum)

JACKET FLAWS:

Spark Test, 1.5 kV (rms)

Impulse Dielectric Test, 6.0 kV (peak)

LIFE CYCLE: 200 ± 3°C for 168 hours

LOW TEMPERATURE-COLD BEND: -65 ± 2°C for 4 hours

SHIELD COVERAGE: 85% (minimum)

VOLTAGE WITHSTAND TEST (Post Environmental):

1000 volts (rms), 60 Hz, 1 minute

#### PART NUMBER:

The "X" in the part numbers on page 1 shall be replaced by the applicable conductor material designator as follows:

- 1 tin-coated copper
- 2 silver-coated copper
- 3 nickel-coated copper
- 4 silver-coated high strength copper alloy (AWG's 26 -20 only)

The "\*" in the part numbers on page 1 shall be replaced by color code designators with a slash separating the component wire colors and a dash separating the component wire colors from the jacket color. Colors shown do not necessarily reflect the sequence of manufacturing.

1/ Example: AWG 20, tin-coated copper wires, black, brown and red component wires; white jacket: 44A1231-20-0/1/2-9

1/ See footer section on page 1

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

### TE Connectivity:

<u>44A1231-16-9/93/96-9</u> <u>44A1231-22-1/2/3-9</u> <u>44A1231-6-9/95/96-9</u> <u>44A1231-0-ST3-9CS3030</u> <u>44A1231-14-0/5/9-9</u> 44A1231-18-0/2/9-9 44A1231-4-ST3-9CS3030