## SPECIFICATION CONTROL DRAW

44A114X

CABLE, RADIATION-CROSSLINKED, POLYALKENE-INSULATED, FOUR CONDUCTOR, SHIELDED, JACKETED, LIGHTWEIGHT, GENERAL PURPOSE

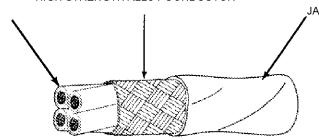
28-Mar-11

F1

This specification sheet forms a part of the latest issue of Raychem Specification 44 and MIL-W-81044 as applicable

SHIELD - COPPER, COATING SAME AS ON CONDUCTOR EXCEPT TIN-COATED SHIELD WITH SILVER-COATED HIGH STRENGTH ALLOY CONDUCTOR

COMPONENT WIRE - 44 A011 X



JACKET - RADIATION-CROSSLINKED, MODIFIED PVF,

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.)		
44A114X-26-*	26	36	.006	.008	.119	.137	14.0		
44A114X-24-*	24	36	.006	.008	.134	.154	17.6		
44A114X-22-*	22	36	.006	.008	.151	.175	23.1		
44A114X-20-*	20	36	.007	.009	.172	.200	31.4		
44A114X-18-*	18	36	.007	.009	.196	.229	42.9		
44A114X-16-*	16	36	.007	.009	.213	.249	51.7		
44A114X-14-*	14	36	.007	.009	.254	.298	74.1		
44A114X-12-*	12	36	.008	.010	.302	.355	108.		

TABLE II. CABLE PERFORMANCE DETAILS									
PARTNUMBER	BEND TESTING								
	MANDREL DIAMET (inch) (± 3%)	ER	WEIGHT (lb) (±3%)						
1/	LIFE CYCLE, IMMERSION AND ACCELERATED AGING	COLD BEND	LIFE CYCLE, IMMERSION AND ACCELERATED AGING	COLD BEND					
44A114X-26-*	3.00	3.00	.500	3.00					
44A114X-24-*	6.00	6.00	.750	3.00					
44A114X-22-*	6.00	6.00	.750	6.00					
44A114X-20-*	6.00	6.00	.750	6.00					
44A114X-18-*	6.00	6.00	1.00	6.00					
44A114X-16-*	6.00	6.00	1.00	6.00					
44A114X-14-*	10.0	10.0	2.00	18.0					
44A114X-12-*	10.0	10.0	2.00	18.0					

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.

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. 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.

DIMENSIONS ARE IN INCHES. AND UNLESS OTHERWISE DESIGNATED ARE NOMINAL.

Page 1 of 2

THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.



TE Connectivity Wire & Cable 501 Oakside Avenue Redwood City, CA 94063-3800 Phone: 1-800-227-8816

## CABLE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature VOLTAGE RATING: 600 volts (rms) at sea level ACCELERATED AGING: 300 ± 3°C for 6 hours

BLOCKING: 150 ± 3°C for 6 hours

DIELECTRIC WITHSTAND: 2500 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/in<sup>2</sup> (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)

VOLTAGEWITHSTANDTEST(Post Environmental):

1000 volts (rms), 60 Hz, 1 minute

## PARTNUMBER:

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
- 6 nickel-coated high strength copper alloy

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.

Components are not neccesarily shown in sequence of manufacturing.

1/ Example: AWG 20, tin-coated copper, black, brown, red and orange component wires; white jacket: 44A1141-20-0/1/2/3-9

1/ see footer section on page 1