SPECIFICATION CONTROL DRAWING

44AM117+

TITLE: SEVEN CONDUCTOR CABLE, SHIELDED, JACKETED, GENERAL PURPOSE, 600 VOLT

Date: 11-23-05

Revision: B

This specification sheet forms a part of the latest issue of Raychem Specification 44 and NEMA WC 27500 as applicable.

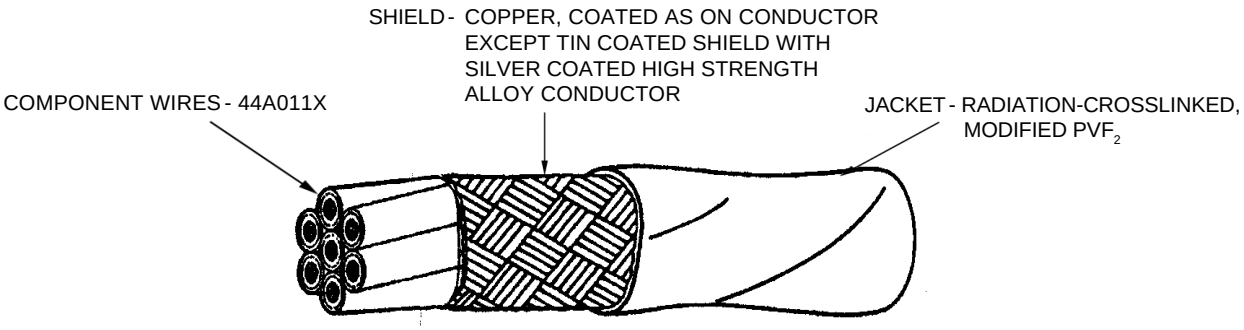


TABLE I. CABLE CONSTRUCTION DETAILS

PART NUMBER 1/	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (in.)		OUTSIDE DIAMETER (in.)		MAXIMUM WEIGHT (lbs/1000 ft.)
			MINIMUM	MAXIMUM	NOMINAL	MAXIMUM	
44AM117+-26-*	26	38	.005	.010	.135	.142	18.7
44AM117+-24-*	24	38	.005	.010	.153	.161	25.0
44AM117+-22-*	22	38	.006	.012	.176	.184	34.1
44AM117+-20-*	20	38	.006	.012	.200	.208	46.5
44AM117+-18-*	18	38	.007	.014	.230	.239	65.7
44AM117+-16-*	16	38	.007	.014	.251	.262	80.9
44AM117+-14-*	14	36	.007	.014	.308	.323	125.
44AM117+-12-*	12	36	.007	.014	.365	.383	185.

TABLE II. CABLE PERFORMANCE DETAILS

PART NUMBER 1/	BEND TESTING			
	MANDREL DIAMETER (inch) (± 3%)		WEIGHT (lb) (± 3%)	
	IMMERSION AND CROSSLINKED VERIFICATION	COLD BEND	IMMERSION AND CROSSLINKED VERIFICATION	COLD BEND
44AM117+-26-*	6.00	6.00	.875	5.25
44AM117+-24-*	6.00	6.00	1.38	5.25
44AM117+-22-*	6.00	6.00	1.38	10.5
44AM117+-20-*	6.00	6.00	1.38	10.5
44AM117+-18-*	6.00	6.00	1.75	10.5
44AM117+-16-*	10.0	10.0	1.75	10.5
44AM117+-14-*	10.0	10.0	3.50	31.5
44AM117+-12-*	18.0	18.0	3.50	31.5

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.

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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CABLE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C
Maximum continuous conductor temperature
VOLTAGE RATING: 600 volts (rms) at sea level
BLOCKING: 150 ± 3°C for 6 hours
CROSSLINKED VERIFICATION: 200 ± 5°C for 6 hours
DIELECTRIC WITHSTAND: 1500 volts (rms), 60 Hz, 15 seconds (minimum), 30 seconds (maximum)
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)
LOW TEMPERATURE-COLD BEND: -55 ± 5°C for 4 hours
SHIELD COVERAGE: 85% (minimum)
VOLTAGE WITHSTAND TEST (POST ENVIRONMENTAL): 1000 volts (rms), 60 Hz, 1 minute

PART NUMBER:
The "+" in the part numbers on page 1 shall be replaced by the applicable conductor material designators as follow:

1 tin coated copper
2 silver coated copper
3 nickel coated copper
4 silver coated high strength copper alloy (AWG's 26-16 only)
6 nickel 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 24, tin-coated copper, black, brown, red, orange, yellow, green and blue component wires; white jacket: 44AM1171-24-0/1/2/3/4/5/6-9

1/ See footer section on page 1.

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