

# SPECIFICATION CONTROL DRAWING

SCD

**44AM115+**

Title

FIVE CONDUCTOR CABLE, SHIELDED, JACKETED,  
GENERAL PURPOSE, 600 VOLT

Date

8-15-16

Revision

G

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

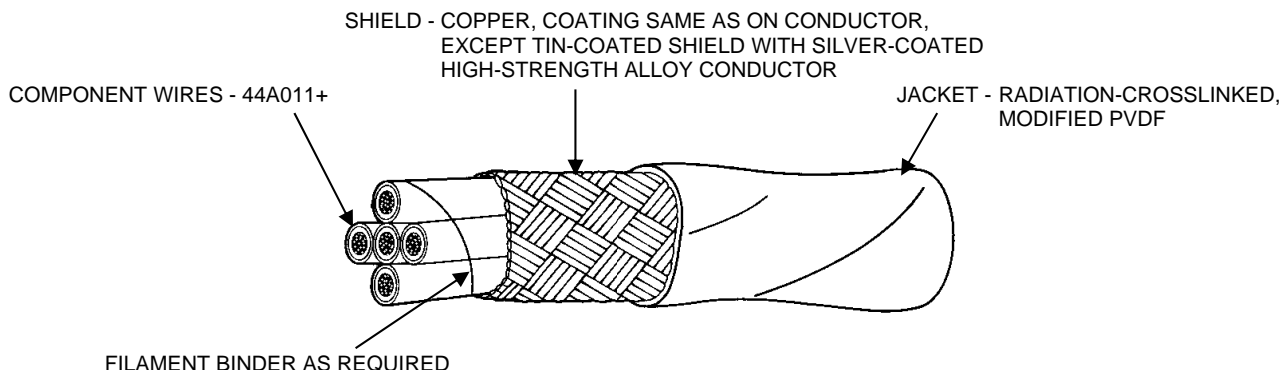


TABLE I. CABLE CONSTRUCTION DETAILS

PART NUMBER 1/	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (inch)		OUTSIDE DIAMETER (inch)		MAXIMUM WEIGHT (lbs/1000 ft.)
			MINIMUM	MAXIMUM	NOMINAL	MAXIMUM	
44AM115+-26-*	26	38	.005	.010	.125	.142	15.0
44AM115+-24-*	24	38	.005	.010	.141	.161	19.8
44AM115+-22-*	22	38	.005	.010	.160	.183	26.0
44AM115+-20-*	20	38	.006	.012	.184	.210	35.8
44AM115+-18-*	18	38	.006	.012	.211	.242	50.1
44AM115+-16-*	16	38	.007	.014	.231	.266	61.9
44AM115+-14-*	14	38	.007	.014	.277	.319	91.0
44AM115+-12-*	12	36	.007	.014	.333	.383	139.

TABLE II. CABLE PERFORMANCE DETAILS

PART NUMBER 1/	BEND TESTING			
	MANDREL DIAMETER (inch) (± 3%)		WEIGHT (lb) (± 3%)	
	IMMERSION AND CROSSLINKED VERIFICATION		IMMERSION AND CROSSLINKED VERIFICATION	COLD BEND
44AM115+-26-*	3.00		.625	3.75
44AM115+-24-*	6.00		.938	3.75
44AM115+-22-*	6.00		.938	7.50
44AM115+-20-*	6.00		.938	7.50
44AM115+-18-*	6.00		1.25	7.50
44AM115+-16-*	6.00		1.25	7.50
44AM115+-14-*	10.0		2.50	22.5
44AM115+-12-*	10.0		2.50	22.5

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 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. 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.





## 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 inches (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)

LOW TEMPERATURE-COLD BEND: -55 ± 5°C for 4 hours

SHIELD COVERAGE: 85% (minimum)

VOLTAGE WITHSTAND (Post Environmental): 1000 volts (rms), 60 Hz, 1 minute

1/ PART NUMBER:

The "+" in the part numbers in Tables I and II shall be replaced with a 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 26-16 only)
- 6 nickel-coated high-strength copper alloy (AWG 26-20 only)

The "\*\*\*" in the part numbers in Tables I and II 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.

Example: AWG 20, tin-coated copper conductors; red, orange, green, blue, and white component wires; white jacket: 44AM1151-20-2/3/5/6/9-9