

SPECIFICATION CONTROL DRAWING

44AM183X

TITLE THREE CONDUCTOR CABLE, RADIATION-CROSSLINKED, POLYALKENE-INSULATED, SHIELDED, JACKETED, MEDIUM WEIGHT, AIRFRAME

Date 05-24-01

Revision

B

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

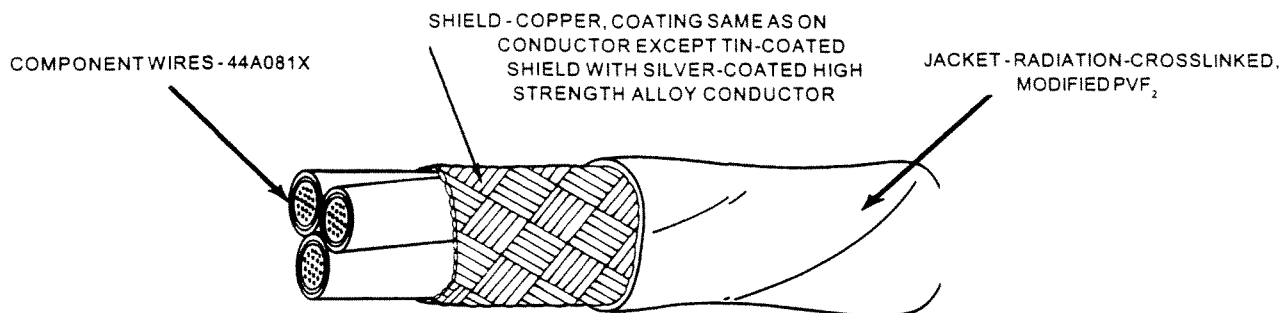


TABLE I. CABLE CONSTRUCTION DETAILS

PARTNUMBER	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (in.)		OUTSIDE DIAMETER (in.)		MAXIMUM WEIGHT (lb/1000 ft)
			MINIMUM	MAXIMUM	NOMINAL	MAXIMUM	
44AM183X-24-*	24	38	.005	.010	.150	.157	17.3
44AM183X-22-*	22	38	.006	.012	.169	.177	22.7
44AM183X-20-*	20	38	.006	.012	.186	.194	28.7
44AM183X-18-*	18	38	.006	.012	.208	.217	37.8
44AM183X-16-*	16	38	.007	.014	.227	.236	45.6
44AM183X-14-*	14	38	.007	.014	.268	.279	64.8
44AM183X-12-*	12	36	.007	.014	.313	.329	94.4
44AM183X-10-*	10	36	.007	.014	.376	.395	138.

TABLE II. CABLE PERFORMANCE DETAILS

PARTNUMBER	BEND TESTING			
	MANDREL DIAMETER (inch) (± 3%)		WEIGHT (lb) (± 3%)	
	ACCELERATED AGING IMMERSION AND LIFE CYCLE	COLD BEND	ACCELERATED AGING IMMERSION AND LIFE CYCLE	COLD BEND
44AM183X-24-*	6.00	6.00	.750	13.5
44AM183X-22-*	6.00	6.00	2.25	13.5
44AM183X-20-*	6.00	6.00	3.00	18.0
44AM183X-18-*	6.00	6.00	3.00	18.0
44AM183X-16-*	6.00	6.00	3.00	22.5
44AM183X-14-*	10.0	10.0	3.00	22.5
44AM183X-12-*	10.0	10.0	3.00	22.5
44AM183X-10-*	18.0	18.0	3.00	22.5

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

COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-881

DIMENSIONS ARE IN INCHES, AND UNLESS OTHERWISE DESIGNATED ARE NOMINAL

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CABLE RATINGS AND ADDITIONAL REQUIREMENTS**TEMPERATURE RATING: 150°C**

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms)**BLOCKING: 150 ± 3°C for 6 hours****CROSSLINK VERIFICATION: 200 ± 5°C for 6 hours****DIELECTRIC WITHSTAND: 1500 volts (rms), 60 Hz, 15 sec. (min), 30 sec. (max)****FLAMMABILITY: 30 seconds (maximum); 3 in. (maximum);**

no flaming of facial tissue

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), 60 Hz, 100% test

Impulse Dielectric Test, 6.0 kV (peak), 100% test

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 "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.

Example: AWG 20, tin-coated copper wire; white, brown and red component wires;
white jacket; 44AM1831-20-9/1/2-9