

SPECIFICATION CONTROL DRAWING

44A183X

TITLE THREE CONDUCTOR CABLE, RADIATION-CROSSLINKED, POLYALKENE-INSULATED, SHIELDED, JACKETED, MEDIUM WEIGHT, AIRFRAME, 600 VOLT

Date 07-31-01

Revision E

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

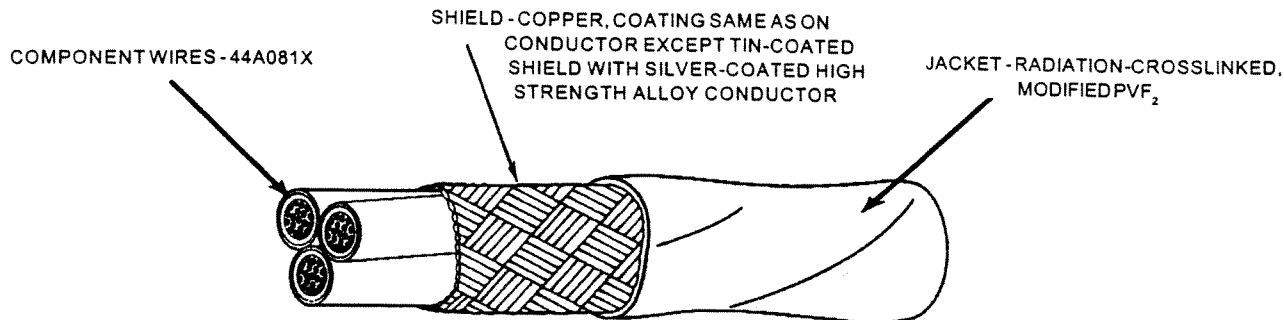


TABLE I. CABLE CONSTRUCTION DETAILS

PART NUMBER	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (in.)		OUTSIDE DIAMETER (in.)		MAXIMUM WEIGHT (lb/1000 ft)
			MINIMUM	NOMINAL	NOMINAL	MAXIMUM	
44A183X-24-*	24	36	.006	.008	.156	.163	18.7
44A183X-22-*	22	36	.007	.009	.175	.182	23.9
44A183X-20-*	20	36	.007	.009	.192	.199	30.5
44A183X-18-*	18	36	.007	.009	.214	.222	40.3
44A183X-16-*	16	36	.007	.009	.233	.241	47.6
44A183X-14-*	14	36	.008	.010	.276	.286	68.5
44A183X-12-*	12	36	.008	.010	.315	.331	94.4
44A183X-10-*	10	36	.008	.010	.376	.395	138.
44A183X- 8-*	8	34	.010	.012	.513	.539	249.

TABLE II. CABLE PERFORMANCE DETAILS

PART NUMBER	BEND TESTING			
	MANDREL DIAMETER (inch) (± 3%)		WEIGHT (lb) (± 3%)	
	IMMERSION AND CROSSLINKED VERIFICATION	COLD BEND	IMMERSION AND CROSSLINKED VERIFICATION	COLD BEND
44A183X-24-*	6.00	6.00	375	14.0
44A183X-22-*	6.00	6.00	375	14.0
44A183X-20-*	6.00	6.00	500	18.0
44A183X-18-*	6.00	6.00	750	18.0
44A183X-16-*	6.00	6.00	750	23.0
44A183X-14-*	10.0	10.0	1.00	23.0
44A183X-12-*	10.0	10.0	1.50	23.0
44A183X-10-*	18.0	18.0	1.50	22.5
44A183X- 8-*	18.0	18.0	2.00	27.0

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

COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681.

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

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

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms)**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/in² (minimum)**JACKET FLAWS:**

Spark Test, 1.5 kV (rms), 100% test

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

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): (After Accelerated**

Aging, Immersion, Life Cycle and Low Temperature-Cold Bend)

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, black and red component wires;
white jacket; 44A1831-20-9/0/2-9