

SPECIFICATION CONTROL DRAWING

44A182X

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

Date 9-15-97

Revision F

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

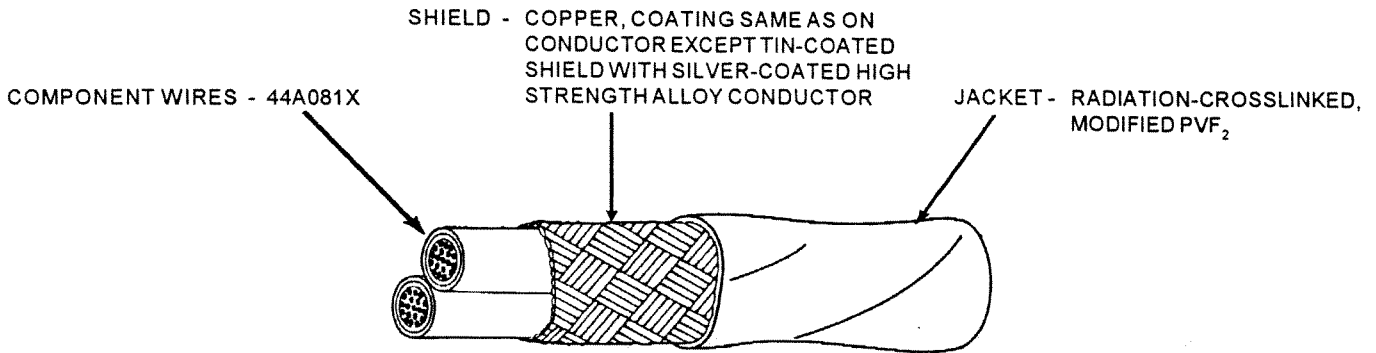


TABLE I. CABLE CONSTRUCTION DETAILS

PART NUMBER	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (in.)		OUTSIDE DIAMETER (in.)		MAXIMUM WEIGHT (lb/1000 ft)
			MINIMUM	NOMINAL	NOMINAL	MAXIMUM	
44A182X-24-*	24	36	.006	.008	.147	.153	14.6
44A182X-22-*	22	36	.006	.008	.163	.170	18.1
44A182X-20-*	20	36	.007	.009	.181	.188	23.2
44A182X-18-*	18	36	.007	.009	.201	.209	29.9
44A182X-16-*	16	36	.007	.009	.219	.227	35.3
44A182X-14-*	14	36	.007	.009	.257	.267	49.2
44A182X-12-*	12	36	.008	.010	.295	.305	67.8
44A182X-10-*	10	36	.008	.010	.353	.371	98.8
44A182X- 8-*	8	34	.010	.012	.479	.503	172.
44A182X- 6-*	6	34	.010	.012	.579	.608	249.
44A182X- 4-*	4	34	.015	.018	.703	.738	395.
44A182X- 2-*	2	34	.015	.018	.863	.906	591.

TABLE II. CABLE PERFORMANCE DETAILS

PART NUMBER	BEND TESTING			
	MANDREL DIAMETER (inch) (± 3%)		WEIGHT (lb) (± 3%)	
	IMMERSION, LIFE CYCLE AND ACCELERATED AGING	COLD BEND	IMMERSION, LIFE CYCLE AND ACCELERATED AGING	COLD BEND
44A182X-24-*	6.00	6.00	.375	9.00
44A182X-22-*	6.00	6.00	.375	9.00
44A182X-20-*	6.00	6.00	.500	12.0
44A182X-18-*	6.00	6.00	.750	12.0
44A182X-16-*	6.00	6.00	.750	15.0
44A182X-14-*	10.0	10.0	1.00	15.0
44A182X-12-*	10.0	10.0	1.00	15.0
44A182X-10-*	18.0	18.0	1.50	15.0
44A182X- 8-*	18.0	18.0	2.00	18.0
44A182X- 6-*	18.0	18.0	2.00	30.0
44A182X- 4-*	18.0	18.0	3.00	30.0
44A182X- 2-*	18.0	18.0	4.00	30.0

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.

Raychem

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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), 60 Hz, 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):

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 (AWG's 26 - 20 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.

Example: AWG 20, tin-coated copper wire; white and black component wires; white jacket; 44A1821-20-9/0-9