

# SPECIFICATION CONTROL DRAWING

44A432X

TITLE TWO CONDUCTOR CABLE, RADIATION-CROSSLINKED, POLYALKENE-INSULATED, JACKETED, LIGHTWEIGHT, GENERAL PURPOSE, 2500 VOLT

Date 11-15-95

Revision B

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

COMPONENT WIRES - 44A031X

JACKET - RADIATION-CROSSLINKED, MODIFIED PVF<sub>2</sub>

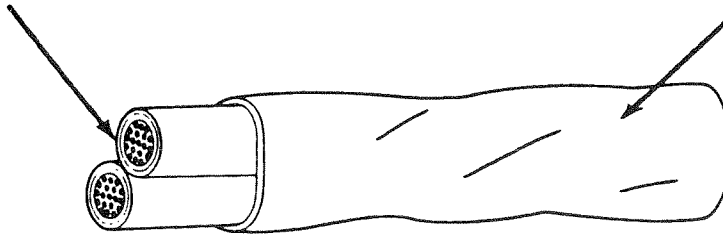


TABLE I. CABLE CONSTRUCTION DETAILS

PART NUMBER	CONDUCTOR SIZE (AWG)	JACKET THICKNESS (in.)		OUTSIDE DIAMETER (in.)		MAXIMUM WEIGHT (lb/1000 ft)
		MINIMUM	NOMINAL	NOMINAL	MAXIMUM	
44A432X-24*	24	.006	.008	.130	.136	8.8
44A432X-22*	22	.006	.008	.154	.161	12.1
44A432X-20*	20	.007	.009	.174	.181	16.7
44A432X-18*	18	.007	.009	.194	.201	22.6
44A432X-16*	16	.007	.009	.212	.220	27.7
44A432X-14*	14	.007	.009	.248	.256	39.8
44A432X-12*	12	.008	.010	.282	.292	58.1
44A432X-10*	10	.008	.010	.342	.359	85.7
44A432X- 8*	8	.010	.012	.462	.485	149.

TABLE II. CABLE PERFORMANCE DETAILS

PART NUMBER	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
44A432X-24*	3.50	3.50	1.00	9.00
44A432X-22*	4.25	4.25	3.00	9.00
44A432X-20*	5.00	5.00	4.00	12.0
44A432X-18*	5.50	5.50	4.00	12.0
44A432X-16*	6.00	6.00	5.00	15.0
44A432X-14*	7.00	7.00	5.00	15.0
44A432X-12*	8.00	8.00	5.00	15.0
44A432X-10*	9.00	9.00	5.00	15.0
44A432X- 8*	18.00	18.00	6.00	18.0

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:** 2500 volts (rms)

**ACCELERATED AGING:** 225 ± 2°C for 6 hours

**BLOCKING:** 150 ± 3°C for 6 hours

**DIELECTRIC WITHSTAND:** 5000 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/in<sup>2</sup> (minimum)

**LIFE CYCLE:** 200 ± 3°C for 168 hours

**LOW TEMPERATURE-COLD BEND:** -65 ± 2°C for 4 hours

**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 designators as follow:

- 1 tin-coated copper
- 2 silver-coated copper
- 3 nickel-coated copper
- 4 silver-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 24, tin-coated copper, white and black component wires;

white jacket: 44A4321-24-9/0-9