

SPECIFICATION CONTROL DRAWING

44A132X

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

Date 10-6-95

Revision E

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

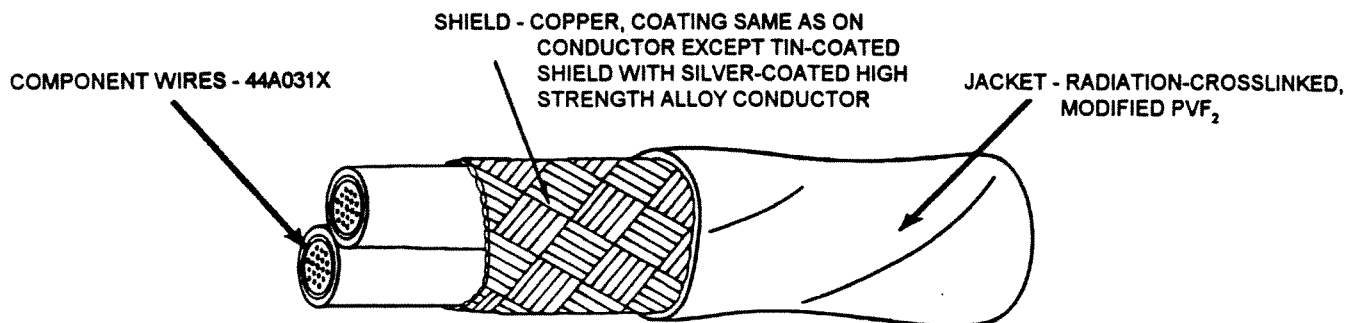


TABLE I. CABLE CONSTRUCTION DETAILS

| PART NUMBER | CONDUCTOR SIZE (AWG) | SHIELD SIZE (AWG) | JACKET THICKNESS (in.) | | OUTSIDE DIAMETER (in.) | | MAXIMUM WEIGHT (lb/1000 ft) |
|-------------|----------------------|-------------------|------------------------|---------|------------------------|---------|-----------------------------|
| | | | MINIMUM | NOMINAL | NOMINAL | MAXIMUM | |
| 44A132X-24* | 24 | 36 | .006 | .008 | .153 | .160 | 15.4 |
| 44A132X-22* | 22 | 36 | .007 | .009 | .179 | .186 | 20.4 |
| 44A132X-20* | 20 | 36 | .007 | .009 | .197 | .204 | 25.4 |
| 44A132X-18* | 18 | 36 | .007 | .009 | .217 | .225 | 32.0 |
| 44A132X-16* | 16 | 36 | .007 | .009 | .235 | .243 | 37.9 |
| 44A132X-14* | 14 | 36 | .008 | .010 | .273 | .283 | 52.1 |
| 44A132X-12* | 12 | 36 | .008 | .010 | .305 | .320 | 70.6 |
| 44A132X-10* | 10 | 36 | .008 | .010 | .365 | .383 | 101. |
| 44A132X- 8* | 8 | 36 | .010 | .012 | .483 | .507 | 173. |
| 44A132X- 6* | 6 | 34 | .010 | .012 | .588 | .617 | 268. |
| 44A132X- 4* | 4 | 34 | .016 | .018 | .713 | .749 | 395. |

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 |
| 44A132X-24* | 6.00 | 6.00 | 375 | 9.00 |
| 44A132X-22* | 6.00 | 6.00 | 500 | 9.00 |
| 44A132X-20* | 6.00 | 6.00 | 500 | 12.0 |
| 44A132X-18* | 6.00 | 6.00 | 750 | 12.0 |
| 44A132X-16* | 6.00 | 6.00 | 750 | 15.0 |
| 44A132X-14* | 10.0 | 10.0 | 1.00 | 15.0 |
| 44A132X-12* | 10.0 | 10.0 | 1.50 | 15.0 |
| 44A132X-10* | 18.0 | 18.0 | 2.00 | 15.0 |
| 44A132X- 8* | 18.0 | 18.0 | 2.00 | 18.0 |
| 44A132X- 6* | 18.0 | 18.0 | 2.00 | 30.0 |
| 44A132X- 4* | 18.0 | 18.0 | 2.00 | 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

Raychem Corporation
300 Constitution Drive, Menlo Park, California 94025
1-800-2 RAYCHEM FAX: 415-361-6297

CABLE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature

VOLTAGE RATING: 2500 volts (rms)

ACCELERATED AGING: 300 ± 3°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/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): (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

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 brown component wires;
white jacket; 44A1321-20-9/1-9