

SPECIFICATION CONTROL DRAWING

44A1312

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

Date 4-29-91

Revision A

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

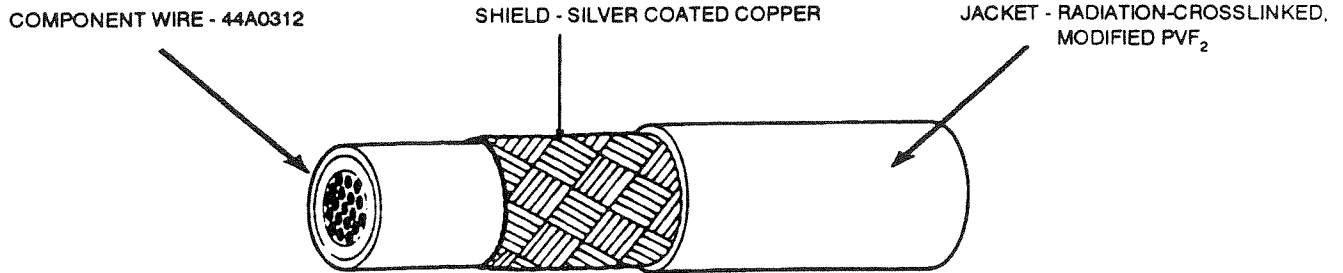


TABLE I. CABLE CONSTRUCTION DETAILS

PART NUMBER	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (in.)		OUTSIDE DIAMETER (in.)		MAXIMUM WEIGHT (lb/1000 ft)
			MINIMUM	NOMINAL	NOMINAL	MAXIMUM	
44A1312-24-*	24	38	.006	.008	.091	.096	8.0
44A1312-22-*	22	38	.006	.008	.107	.113	11.5
44A1312-20-*	20	36	.006	.008	.116	.122	14.0
44A1312-18-*	18	36	.006	.008	.126	.132	17.4
44A1312-16-*	16	36	.006	.008	.135	.141	20.3
44A1312-14-*	14	36	.006	.008	.153	.160	27.3
44A1312-12-*	12	36	.007	.009	.171	.178	37.1
44A1312-10-*	10	36	.007	.009	.201	.209	52.6
44A1312- 8-*	8	36	.007	.009	.259	.269	85.5
44A1312- 6-*	6	36	.008	.010	.311	.327	125.
44A1312- 4-*	4	36	.008	.010	.369	.385	188.

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
44A1312-24-*	3.00	2.50	.188	4.50
44A1312-22-*	3.00	3.00	.250	4.50
44A1312-20-*	3.00	3.25	.250	6.00
44A1312-18-*	6.00	3.50	.375	6.00
44A1312-16-*	6.00	3.75	.375	7.50
44A1312-14-*	6.00	4.25	.375	7.50
44A1312-12-*	6.00	5.00	.375	7.50
44A1312-10-*	6.00	5.50	.750	7.50
44A1312- 8-*	10.0	7.00	1.00	9.00
44A1312- 6-*	10.0	9.00	1.50	15.0
44A1312- 4-*	18.0	10.0	2.00	15.0

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

THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.

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: 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 "*" in the part numbers on page 1 shall be replaced by color code designators with a dash separating the component wire color from the jacket color.

Example: AWG 24, white component wire; white jacket: 44A1312-24-9-9