

CABLE, ELECTRIC, RADIATION-CROSSLINKED, POLYALKENE-INSULATED,  
ONE CONDUCTOR, SHIELDED, JACKETED, MEDIUM WEIGHT, AIRFRAME

28 June 1984

150°C

The complete requirements for procuring the cable described herein shall consist of this document and the issue in effect of Raychem Specification 44 and Specification MIL-W-81044 as applicable.

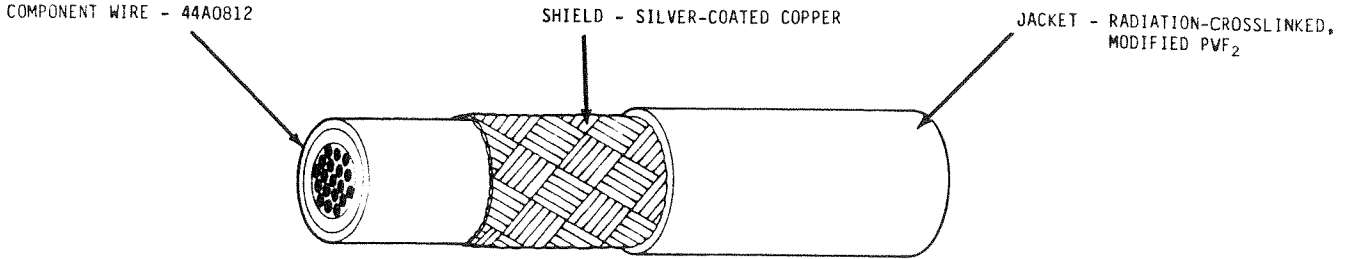


TABLE I. CABLE CONSTRUCTION DETAILS

PART NUMBER	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (in.)		OUTSIDE DIAMETER (in.)		MAXIMUM WEIGHT (lb/1000 ft.)
			MINIMUM	NOMINAL 1/	NOMINAL 1/	MAXIMUM	
44AM1812-24-*	24	38	.005	.008	.087	.093	7.9
44AM1812-22-*	22	38	.005	.008	.095	.101	9.8
44AM1812-20-*	20	38	.005	.008	.103	.110	12.0
44AM1812-18-*	18	38	.005	.008	.113	.120	15.2
44AM1812-16-*	16	38	.005	.008	.122	.129	18.0
44AM1812-14-*	14	38	.005	.008	.141	.148	24.8
44AM1812-12-*	12	38	.005	.008	.159	.167	33.7

1/ Nominal values are for information only. Nominal values are not requirements.

TABLE II. CABLE PERFORMANCE DETAILS

PART NUMBER	CONDUCTOR SIZE (AWG)	BEND TESTING			
		MANDREL DIAMETER (in.) (±3%)		WEIGHT (lb) (±3%)	
		IMMERSION AND CROSSLINKED VERIFICATION	COLD BEND	IMMERSION AND CROSSLINKED VERIFICATION	COLD BEND
44AM1812-24-*	24	3.00	3.00	.250	4.50
44AM1812-22-*	22	3.00	3.00	.750	4.50
44AM1812-20-*	20	3.00	3.00	1.00	6.00
44AM1812-18-*	18	3.00	3.00	1.00	6.00
44AM1812-16-*	16	3.00	3.00	1.00	7.50
44AM1812-14-*	14	6.00	6.00	1.00	7.50
44AM1812-12-*	12	6.00	6.00	1.00	7.50

CABLE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms)

BLOCKING: 150 ± 3°C for 6 hours

DIELECTRIC WITHSTAND: 1500 volts, 60 Hz (rms),

15 seconds (minimum), 30 seconds (maximum)

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 psi (minimum)

JACKET FLAWS:

Spark Test, 1.5 kV, 60 Hz (rms), 100% test

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

LOW TEMPERATURE-COLD BEND: -55 ± 5°C for 4 hours

SHIELD COVERAGE: 85% (minimum)

CROSSLINKED VERIFICATION: 200 ± 5°C for 6 hours

VOLTAGE WITHSTAND TEST: (After Immersion, Low

Temperature-Cold Bend, Crosslinked Verification)

1000 volts, 60 Hz (rms), 1 minute

PART NUMBER:

The "\*" in the part numbers above shall be replaced by color code designators in accordance with MIL-STD-681 with a dash separating the component wire color from the jacket color.

Example: AWG 20, white component wire; white jacket: 44AM1812-20-9-9

**Raychem**

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