

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

13 November 1984  
Revision A

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.

COMPONENT WIRE - 44A0811

SHIELD - TIN-COATED COPPER

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

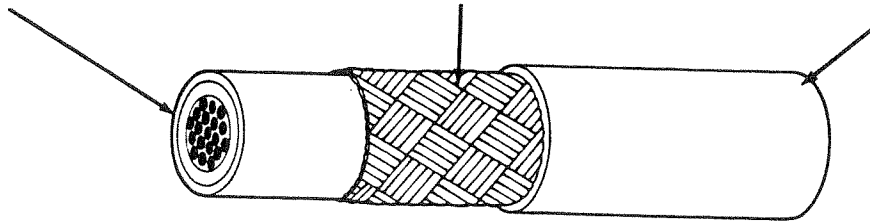


TABLE I. CABLE CONSTRUCTION DETAILS

PART NUMBER	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (in.)		OUTSIDE DIAMETER (in.)		MAXIMUM WEIGHT (lb/1000 ft.)
			MINIMUM	NOMINAL $\pm$	NOMINAL $\pm$	MAXIMUM	
44AM1811-24-*	24	38	.005	.008	.087	.093	7.9
44AM1811-22-*	22	38	.005	.008	.095	.101	9.8
44AM1811-20-*	20	38	.005	.008	.103	.110	12.0
44AM1811-18-*	18	38	.005	.008	.113	.120	15.2
44AM1811-16-*	16	38	.005	.008	.122	.129	18.0
44AM1811-14-*	14	38	.005	.008	.141	.148	24.8
44AM1811-12-*	12	38	.005	.008	.159	.167	33.7
44AM1811-10-*	10	38	.006	.009	.190	.200	48.9
44AM1811- 8-*	8	38	.007	.010	.251	.264	81.3
44AM1811- 6-*	6	36	.007	.010	.305	.320	126.
44AM1811- 4-*	4	36	.007	.010	.361	.379	185.

TABLE II. CABLE PERFORMANCE DETAILS

PART NUMBER	CONDUCTOR SIZE (AWG)	BEND TESTING			
		MANDREL DIAMETER (in.) ( $\pm$ 3%)		WEIGHT (lb) ( $\pm$ 3%)	
		IMMERSION AND CROSSLINKED VERIFICATION	COLD BEND	IMMERSION AND CROSSLINKED VERIFICATION	COLD BEND
44AM1811-24-*	24	3.00	3.00	.250	4.50
44AM1811-22-*	22	3.00	3.00	.750	4.50
44AM1811-20-*	20	3.00	3.00	1.00	6.00
44AM1811-18-*	18	3.00	3.00	1.00	6.00
44AM1811-16-*	16	3.00	3.00	1.00	7.50
44AM1811-14-*	14	6.00	6.00	1.00	7.50
44AM1811-12-*	12	6.00	6.00	1.00	7.50
44AM1811-10-*	10	6.00	6.00	1.00	7.50
44AM1811- 8-*	8	10.0	10.0	1.50	9.00
44AM1811- 6-*	6	10.0	10.0	1.50	15.00
44AM1811- 4-*	4	10.0	10.0	1.50	15.00

CABLE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms)

BLOCKING: 150  $\pm$  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  $\pm$  5°C for 4 hours

SHIELD COVERAGE: 85% (minimum)

CROSSLINKED VERIFICATION: 200  $\pm$  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  
44AM-1811-20-9-9

**Raychem**

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