

MILITARY SPECIFICATION SHEET
CABLE, RADIO FREQUENCY, FLEXIBLE COAXIAL,
95 OHMS, M17/137-00001

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for procuring the cable described herein shall consist of this document and the latest issue of Specification MIL-C-17.

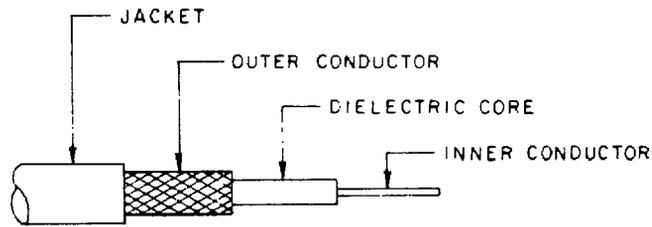


FIGURE 1. Configuration.

TABLE I. Description.

Components	Construction details
Inner conductor	Seven strands of silver-coated, annealed-copper-covered, steel wire, .004 inch each. Overall diameter: 0.012 inch \pm 0.001.
Dielectric core	Type F-1: Solid extruded PTFE. Diameter: 0.102 inch \pm 0.003.
Outer conductor	Single braid of AWG #38, silver-coated copper wire. Diameter: 0.124 inch maximum. Coverage: 91.0% nominal Carriers: 16 Ends: 7 Picks/inch: 12.0% \pm 10
Jacket	Type XIII: PFA. Diameter: 0.141 inch \pm 0.004.

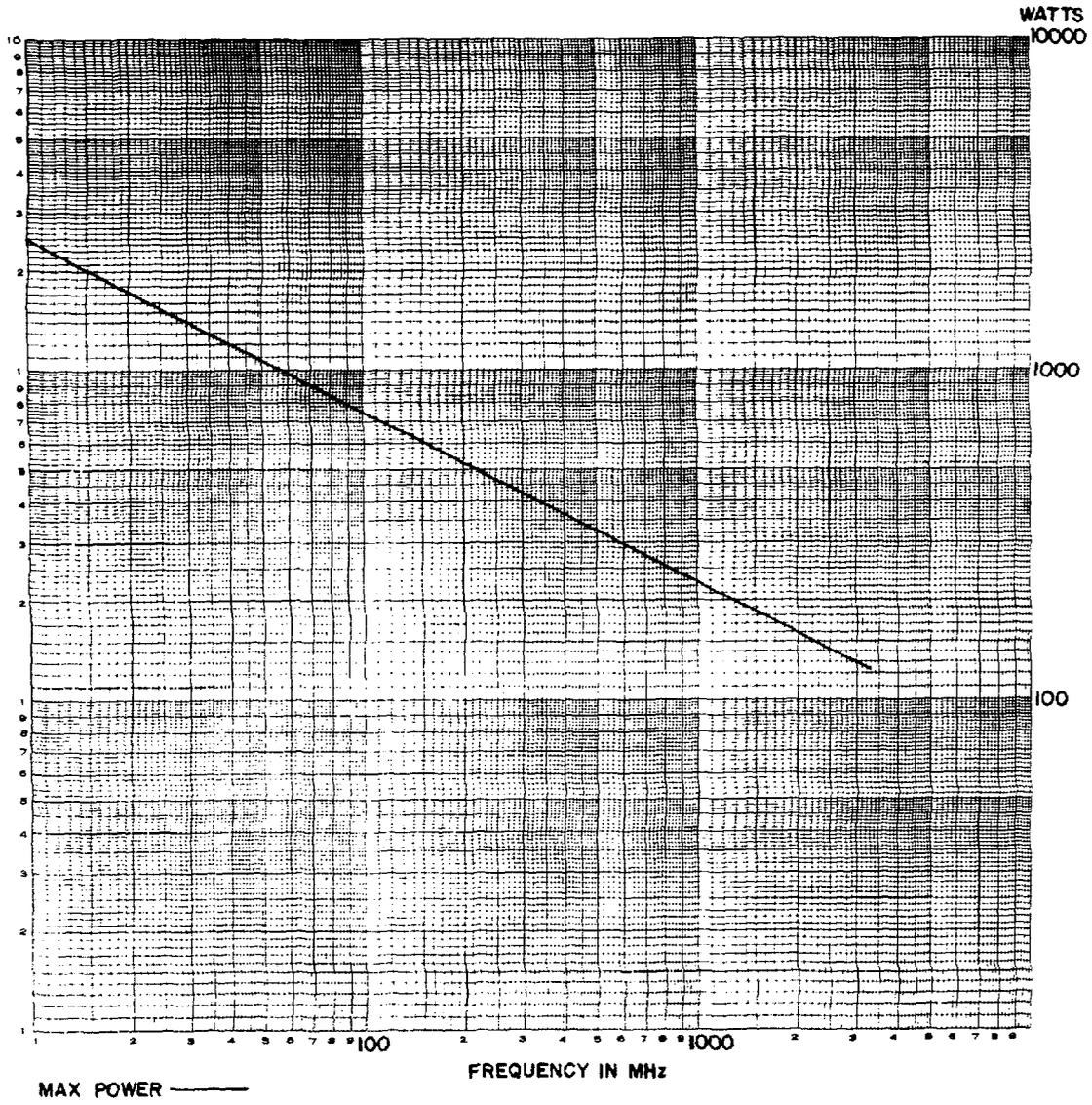


FIGURE 2. Power rating @ 25°C sea level.

ENGINEERING INFORMATION:

Continuous working voltage: 1,100 Vrms, maximum.
 Operating frequency: 3 GHz, maximum.
 Velocity of propagation: 69.5 percent, nominal.
 Power rating: See figure 2.
 Operating temperature range: -55° to +200°C.
 Weight: 2 pounds per 100 feet, maximum.

Inner conductor properties:

DC resistance (maximum at 20°C): 24.45 ohms per 100 feet.
 Elongation: 10 percent, minimum.
 Tensile strength: 50 klbf/inch², minimum.
 Engineering notes: This cable useful in high temperature applications.
 (See connector series "TNC", and "BNC" per MIL-C-39012.)

REQUIREMENTS:

Dimensions, configuration, and descriptions: See figure 1.

Environmental and mechanical:

Visual and mechanical examination: Applicable.
 Eccentricity: 10 percent, maximum.
 Adhesion of conductors:
 Inner conductor to core: 1.5 pounds, minimum; 4 pounds, maximum.
 Stress crack resistance: +250° ±5°C.
 Cold bend: -55° ±2°C.
 Dimensional stability: +200° ±5°C.
 Inner conductor from core: .250 inch, maximum.
 Inner conductor from jacket: .187 inch, maximum.
 Flammability: Applicable.

Electrical:

Spark test: 2,000 Vrms, minimum.
 Voltage withstanding: 2,000 Vrms, minimum.
 Corona extinction voltage: 1,500 Vrms, minimum.
 Characteristic impedance: 95 ohms ±5.
 Attenuation: 17.0 dB per 100 feet maximum at .4 GHz.
 Capacitance: 15.4 pF per foot, maximum.

Part number: M17/137-00001.

Custodians:

Army: EL
 Navy - EC
 Air Force - 99

Review activities:

Army - MI
 Navy - SH
 Air Force - 17, 85, 11
 DLA - ES, IS

User activities:

Army - ME, AT, AR
 Navy - AS, OS, MC
 Air Force - 19

Preparing activity:
 Army - EL

Agent:
 DLA - ES

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