

MILITARY SPECIFICATION SHEET  
 CABLES, RADIO FREQUENCY, COAXIAL, LOW NOISE,  
 50 OHMS, M17/132-00001

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

The requirements for acquiring the cables described herein shall consist of this specification and the latest issue of MIL-C-17.

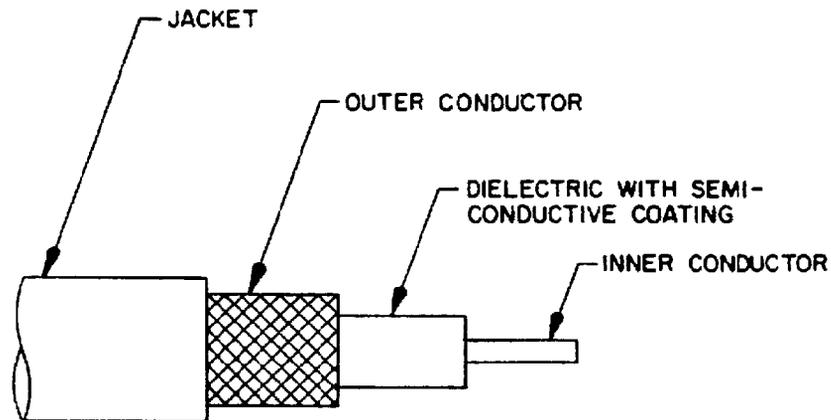


FIGURE 1. Configuration.

TABLE I. Description.

Components	Construction details
Inner conductor	Seven strands of AWG size 38 silver-plated, copper-covered steel wire. Overall diameter: 0.012 ±0.001 inch.
Dielectric	Type F-1 with a semiconducting coating. Overall diameter: .036 ±0.002 inch.
Outer conductor	Silver-coated, AWG size 38 copper strands. Overall diameter: 0.056 inch, maximum. Carriers: 16 Ends: 3 Picks/inch: 25 ±10 percent
Jacket	Type IX. Overall diameter: .073 ±0.004 inch.

**Engineering information:**

Continuous working voltage: 1,500 V rms, maximum.

Operating frequency: 1 GHz, maximum.

Velocity of propagation: 68 percent, nominal.

Operating temperature range: -40°C to +200°C.

**Inner conductor properties:**

DC resistance (maximum at 20°C): 24.45 ohms per 100 feet.

Elongation: 10 percent, minimum.

Tensile strength: 50 klbf/inch<sup>2</sup>, minimum.

Engineering notes: This cable useful in low noise temperature applications.

**REQUIREMENTS:**

Dimensions, configuration, and descriptions: See figure 1 and table I.

**Environmental and mechanical:**

**Adhesion of conductors:**

Inner conductor to core: 1 pound minimum, 4 pounds maximum.

Aging stability: Not applicable.

Stress crack resistance: +230°C ±5°C for 76 hours.

Outer conductor integrity: Not applicable.

Cold bend: -55°C ±2°C.

Dimensional stability: +200°C ±5°C.

Inner conductor from core: .062 inch, maximum.

Inner conductor from jacket: .125 inch, maximum.

Contamination: Not applicable.

Bendability: Not applicable.

Weight: 1.65 pounds per 100 feet, maximum.

**Electrical:**

Test frequency: 50 MHz to 1 GHz.

Spark test: 2,000 V rms +25 percent, -0 percent.

Voltage withstanding: 1,500 V rms.

Insulation resistance: Not applicable.

Corona extinction voltage: 1,000 V rms, minimum.

Characteristic impedance: 50 ±2 ohms.

Attenuation: 50 dB/100 feet maximum at 400 MHz.

Capacitance: 32 pF per foot, maximum.

Capacitance unbalance: Not applicable.

Transmission unbalance: Not applicable.

Mechanically induced noise voltage: 25 millivolts, peak-to-peak maximum.

Time delay: Not applicable.

Part number: See table II.

Supersession data: See table II.

TABLE II. Cross reference of part number.

Part number	Superseded part number or type designation
M17/132-00001	RG-404/U, M17/132-RG404

Revision letters are not used to denote changes due to the extensiveness of the changes.

Custodians:

Army - CR  
Navy - EC  
Air Force - 85

Review activities:

Army - MI  
Navy - SH  
Air Force - 11, 17, 99  
DLA - ES, IS  
NASA - NA

User activities:

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

Preparing activity:

Army - CR

Agent:

DLA - ES

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