

MIL-DTL-17/132C
w/AMENDMENT 1
9 January 2016
SUPERSEDING
MIL-DTL-17/132C
19 June 2015

MILITARY SPECIFICATION SHEET

CABLES, RADIO FREQUENCY, FLEXIBLE, 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 product described herein shall consist of this specification sheet and MIL-DTL-17.

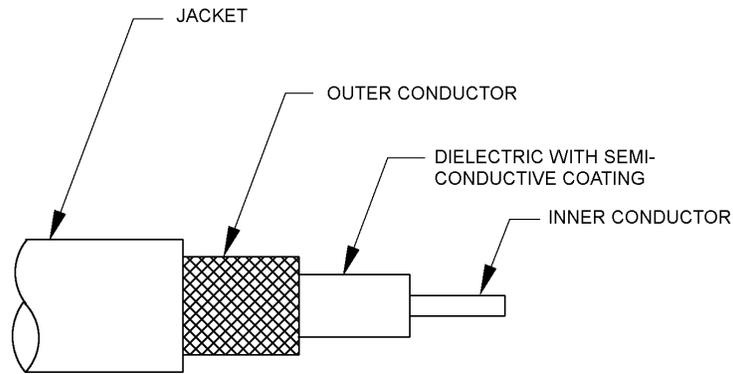


FIGURE 1. Configuration.

TABLE I. Description.

Components	Construction details
Inner conductor	Seven strands of AWG size 38 silver-plated, copper-covered steel wire. Overall diameter: 0.012 ± .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 ± .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 klb_f/inch², minimum.

Engineering notes: This cable is 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° ± 2°C.
Dimensional stability: +200° ± 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 Vrms, +25 percent, -0 percent.
Voltage withstanding: 1,500 Vrms, minimum.
Insulation resistance: Not applicable.
Corona extinction voltage: 1,000 V rms, minimum.
Characteristic impedance: 50 ohms ± 2 ohms.
Attenuation: 29dB/100 feet maximum at 400MHz.
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 or Identifying Number (PIN): M17/132-00001.

Supersession data: See table II.

TABLE II. Cross reference of PIN.

PIN	Superseded PIN	Superseded type designation
M17/132-00001	M17/132-RG404	RG-404/U

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Referenced documents. This document references MIL-DTL-17.

CONCLUDING MATERIAL

Custodians:

Army – CR
Navy – EC
Air Force – 85
DLA - CC

Preparing activity:

DLA - CC

(Project 6145-2015-062)

Review activities:

Army – AT, CR4, MI
Navy – AS, MC, OS, SH
Air Force – 19, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.