

MILITARY SPECIFICATION SHEET

CABLES, RADIO FREQUENCY

SEMIRIGID, COAXIAL, SEMI-AIR-DIELECTRIC,

.495 INCH OUTSIDE DIAMETER, 50 OHMS

The complete requirements for procuring cables described herein shall consist of this document and the latest issue of MIL-C-22931.

REQUIREMENTS:

Operating temperature range: -55° to +200°C

Inner conductor: See table

Dielectric:

Cable core and insulating layer: See table

Outer conductor: Aluminum tubing, corrugated, seamless

Diameter: See table

Jacket: See table

Voltage withstand:

2,000 volts rms (minimum at 60 Hz, or 3,500 volts dc)

Attenuation: See table

Velocity: See table

Capacitance: 25.0 pf/ft

Impedance: 50 ± 2 ohms

Voltage standing wave ratio:

Frequency range (MHz)	Initial (max)	After bending and temperature cycling (max)
500 - 2,000	1.15	1.18
2,000 - 5,000	1.20	1.25
5,000 - 10,000	1.20	1.25

MIL-C-22931/17 (USAF)

Mandrel size for temperature cycling, bending, and cold bend tests:
7.5 inches (190.5mm)

Minimum bending radius: 2.5 inches (63.5mm)

REQUIREMENT <u>1/</u> <u>2/</u>	M22931/17-001
Inner conductor	Silver plated
Overall diameter ± 0.002 (0.05)	Copper wire 0.153 (3.89)
Dielectrics	Polytetra-
Cable Core	fluorethylene
Outer conductor diameter	
Inside (nominal)	0.421 (10.69)
Outside	0.495 (12.57)
Attenuation (dB/100 ft max)	
30 MHz	0.48
400 MHz	2.10
3,000 MHz	6.90
Velocity (percent)	85.0

1/ Dimensions are in inches; millimeters are in parentheses. Metric equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1 inch = 25.4mm.

2/ The following requirements of MIL-C-22931, identified by similarity of paragraph headings, are not applicable to this slash sheet:

- a. Insulation resistance
- b. Pressure tightness
- c. Marking.

NOTE:

1. Cross reference information is as follows:

<u>Part Number</u>	<u>RG Number</u>
M22931/17-001	RG-385/U

Custodian:
Air Force - 11

Preparing activity:
Air Force - 11

Review activities:
Air Force - 17, 85

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