

## RG 400 Coaxial Cable

RG 400 is a high temperature coaxial cable that is used in a wide variety of military and commercial applications. With a high temperature maximum in line with other coax cables like RG142, this assists with installations in heat sensitive environments.

### RG 400 Coaxial Cable Construction

<b>Inner Cond:</b>	Silver Covered Copper
<b>Dielectric:</b>	Solid Polytetrafluoroethylene (PTFE)
<b>Outer Cond:</b>	Silver Covered Copper Shield (x2)
<b>Jacket:</b>	Fluorinated Ethylene Propylene (FEP) Type IX per MIL-C-17

### RG 400 Coaxial Cable Additional Specifications

<b>Weight:</b>	50 lb/ft
<b>Bend Radius:</b>	1.0"
<b>Operating Temperature:</b>	-55°C to +200°C

### RG 400 Coaxial Cable Electrical Specifications

<b>Capacitance:</b>	29.4 pF/ft
<b>Impedance:</b>	50 +/- 2 ohms
<b>Maximum Frequency:</b>	12.4 GHz
<b>Maximum Voltage:</b>	1900 VOLts

### RG 393 Loss Attenuation Specifications and Power Handling by Frequency

<u>Frequency (MHz)</u>	<u>Attenuation (db/100ft)</u>
100	4.5
400	10.5
1000	18.1
2400	30.2
5000	52.1
10000	78.0

## RG 393 Coaxial Cable Mechanical Specifications

**Inner Conductor:**

Material: Silver Covered Copper  
Diameter, in: 0.0384

**Dielectric:**

Material: Solid PTFE  
Diameter, in: 0.116

**Outer Conductor:**

Material 1: Silver Covered Copper  
Material 2: Silver Covered Copper  
Diameter, in: 0.156

**Jacket:**

Material: Fluorinated Ethylene Propylene Type IX per MIL-C-17  
Diameter, in: 0.195

## RG 400 Coaxial Cable Use in the Military

The United States Military uses the M17/128-RG400, a military part number that is equivalent to the RG400 cable. The testing of military coax cables, including RG400 are very rigorous and the specifications even more so. Manufacturers are required to test attenuation and structural return loss by sweeping 22 different 50-ohm cables over the frequency band for which their use is recommended. Among other tests for stability, you can see why the RG400 cable is of high quality for tactical operations and aerospace technology.

