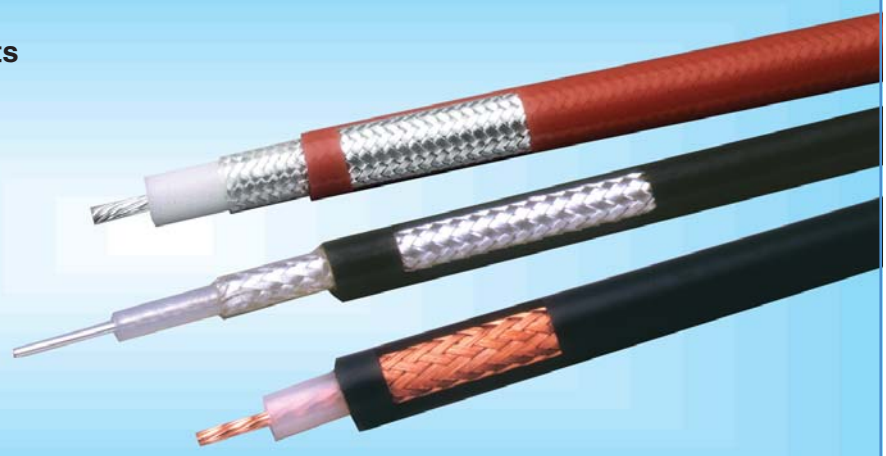
M17/RG

'Select' Types and Sizes

- *Low Loss HF-UHF Interconnect*
- *Wireless Base Station Interconnect*

Features & Benefits

- **Meets all MIL-C-17 Requirements**
- **Good Shielding Effectiveness**
- **Low Passive Intermod (PIM)**
- **Readily available in Distribution**
- **Uses Standard Connectors**



M17/RG's are traditional MIL Spec coax cables that were born 50-60 years ago. Originally created to support WWII military applications, these cables quickly became the products of choice for commercial wireless applications once they hit the surplus market, and continue to be used today.

M17/RG's have been widely adopted for commercial and military applications. Their QPL stature insures a high quality product made to the same spec regardless of the manufacturer.

Some of the key characteristics of M17/RG's are:

Shielding Effectiveness – in the 40 to 60 dB range and is acceptable for many lower frequency applications.

Phase Stable – not the best for phase stability by today's standards but can be optimized by appropriate preconditioning over the temp range of interest.

Attenuation (Loss) – again not the best by today's standards but is usually acceptable at HF frequencies.

Attenuation Stability – silver plated outer conductor prevents oxidation of the conductors thereby minimizing attenuation change vs time. Conversely, bare copper outer conductors may oxidize quite rapidly precipitating loss increase which is only significant at frequencies > 500 MHz.

Power Handling – solid dielectric materials (high thermal conductivity) provides excellent power handling capability.

Temperature Range - broad operating temperature range.

Mechanical Properties – solid dielectric provides superior crush resistance and therefore is well suited for tactical applications.

"Select" M17 Coaxial Cables

M17 Number	Conductor inches (mm)	Dielectric inches (mm)	Shields inches (mm)	Jacket inches (mm)	Weight lbs/foot (kg/m)	Impedance ohms Vp(%)	Capacitance pF/foot (pF/m)	DC Resistance ohms/1kft (/km) Cent. Cond	Shield	Oper. Voltage kvrms	Temp. Range F (C)	M17 Freq. Range
M17/113-RG316	SCCS 7/.0067" 0.0201 (0.51)	PTFE 0.060 (1.52)	1:SC 0.078 (1.98)	FEP-IX 0.098 (2.49)	0.012 (0.018)	50 +/- 2 69.5	29.4 (96.5)	83.3 (273.3)	8.5 (27.9)	1.2	-67 +392 (-55 +200)	.05-3 GHz
M17/84-RG223	SC 0.0355 (0.90)	PE 0.116 (2.95)	2:SC 0.162 (4.11)	PVC-IIA 0.212 (5.38)	0.041 (0.061)	50 +/- 2 65.9	30.8 (101.1)	8.2 (26.9)	2.2 (7.2)	1.9	-40 +185 (-40 +85)	.04-12.4 GHz
M17/60-RG142	SCCS 0.037 (0.94)	PTFE 0.116 (2.95)	1:SC 0.162 (4.11)	FEP-IX 0.195 (4.95)	0.043 (0.064)	50 +/- 2 69.5	29.4 (96.5)	19.1 (62.7)	2.2 (7.2)	1.9	-67 +392 (-55 +200)	.05-8 GHz
M17/75-RG214	SC 7/.0296" 0.0888 (2.26)	PE 0.285 (7.24)	2:SC 0.343 (8.71)	PVC-IIA 0.425 (10.8)	0.130 (0.194)	50 +/- 2 65.9	30.8 (101.1)	1.7 (5.6)	1.3 (4.3)	5.0	-40 +185 (-40 +85)	.05-11 GHz
M17/127-RG393	SC 7/.0312" 0.094 (2.39)	PTFE 0.285 (7.24)	2:SC 0.343 (8.71)	FEP-IX 0.390 (9.91)	0.175 (0.261)	50 +/- 2 69.5	29.4 (96.5)	1.5 (4.9)	1.3 (4.3)	5.0	-67 +392 (-55 +200)	.05-11 GHz