

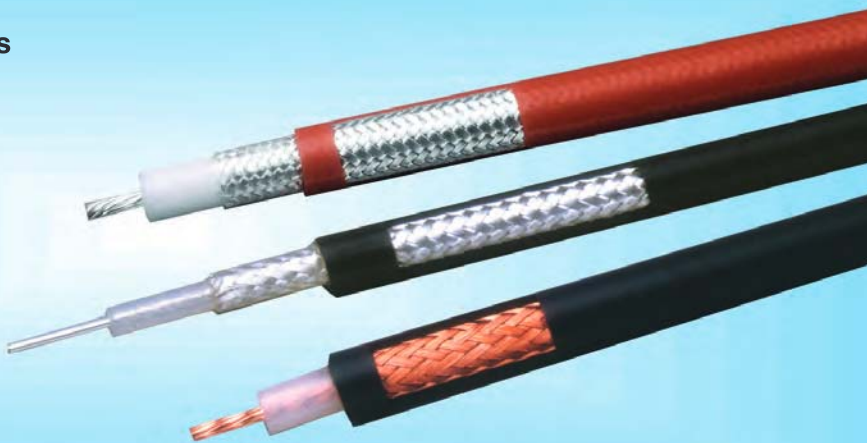
M17/RG

'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



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.

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.

“Select” M17 Coaxial Cables

M17 Number	Conductor	Dielectric	Shields	Jacket	Weight	Impedance	Capacitance	DC Resistance	Oper. Range	Temp.	M17 Freq.
inches (mm)	inches (mm)	inches (mm)	inches (kg/m)	lbs/foot Vp(%)	ohms (pF/m)	pF/foot Cent. Cond	Shield kvrms	ohms/1kft (ohms/100m) Range			
M17/113-RG316	SCCS 7/.0067"	PTFE	1:SC	FEP-IX	0.012	50 +/- 2	29.4	83.3 8.5	1.2	-67 +392	.05-3 GHz
	0.0201 (0.51)	0.060 (1.52)	0.078 (1.98)	0.098 (2.49)	(0.018)	69.5	(96.5)	(273.3) (27.9)		(-55 +200)	
M17/84-RG223	SC	PE	2:SC	PVC-IIA	0.041	50 +/- 2	30.8	8.2 2.2	1.9	-40 +185	.04-12.4 GHz
	0.0355 (0.90)	0.116 (2.95)	0.162 (4.11)	0.212 (5.38)	(0.061)	65.9	(101.1)	(26.9)(7.2)		(-40 +85)	
M17/60-RG142	SCCS	PTFE	2:SC	FEP-IX	0.043	50 +/- 2	29.4	19.1 2.2	1.9	-67 +392	.05-8 GHz
	0.037 (0.94)	0.116 (2.95)	0.162 (4.11)	0.195 (4.95)	(0.064)	69.5	(96.5)	(62.7) (7.2)		(-55 +200)	
M17/75-RG214	SC 7/.0296"	PE	2:SC	PVC-IIA	0.130	50 +/- 2	30.8	1.7 1.3	5.0	-40 +185	.05-11 GHz
	0.0888 (2.26)	0.285 (7.24)	0.343 (8.71)	0.425 (10.8)	(0.194)	65.9	(101.1)	(5.6) (4.3)		(-40 +85)	
M17/127-RG393	SC 7/.0312"	PTFE	2:SC	FEP-IX	0.175	50 +/- 2	29.4	1.5 1.3	5.0	-67 +392	.05-11 GHz
	0.094 (2.39)	0.285 (7.24)	0.343 (8.71)	0.390 (9.91)	(0.261)	69.5	(96.5)	(4.9) (4.3)		(-55 +200)	