

CABLE CONSTRUCTION

1. FEP Jacket (Clear)
2. Silver-Plated Copper Shield
3. Aluminum / Polyimide Shield
4. Silver-Plated Copper Flat Strip Braid
5. PTFE Dielectric
6. Silver-Plated Copper Conductor



This cable is particularly suitable for GPS, TCAS, MLS and SATCOM installations. It is lower loss, more flexible and less than half the weight of RG214 and less than one third the weight of RG393.

This special coaxial design incorporates a multi-layered shielding technique that combines conventional shields with an inner braid woven of flat strips of silver plated copper. This "unitized" shield reduces attenuation at frequencies over 1 GHz when compared to round wire braids in standard coaxial cables. Additionally, the cable VSWR is lower because the braids can be applied more uniformly. The attenuation and VSWR variation due to aging and flexure is substantially less.

It is Skydrol resistant, RoHS compliant and meets the FAA flammability requirements of FAR Part 23 and 25, Appendix F; complies with MIL-C-17 as applicable.

PHYSICAL DATA

• Conductor	15 AWG Solid SPC
• Operating Temperature	-55° to +200°C
• Outer Diameter: in (mm)	0.23 (5.72)
• Minimum Bend Radius: in (mm)	1.20 (30.48)
• Weight: lbs/100 ft (kg/100 m)	5.4 (8.0)

ELECTRICAL DATA

• Impedance: ohms	50
• Capacitance: pF/ft (m)	25.0 (82.0)
• Velocity of Propagation: %	80.0
• Time Delay: ns/ft (m)	1.27 (4.17)
• RF Shielding Effectiveness: dB/min	-90
• DC Resistance: ohms/1000 ft (m)	3.3 (10.7)
• Attenuation: Nom / Max	dB/100 ft (dB/100 m)
• @400 MHz	4.4 / 4.8 (14.4 / 15.7)
• @1.0 GHz	7.0 / 7.7 (23.0 / 25.3)
• @1.6 GHz	8.9 / 9.8 (29.2 / 32.2)
• @5.0 GHz	16.1 / 17.7 (52.8 / 58.1)
• K Values (nom loss):	K1 = 0.215, K2 = 0.000179
• Formula for Attenuation:	$(K1 * \sqrt{F(MHz)}) + (K2 * F(MHz))$

All values nominal unless otherwise noted

PIC P/N **CONNECTOR TYPE**

ARINC

190519	404 Size 1
190501	600 Size 1
190502	600 Modified Size 1
190503	404/600 Size 5

M39012

PIC P/N	CONNECTOR TYPE	PIC P/N	CONNECTOR TYPE
190512	BNC Straight Plug	110580	QMA Straight Plug
190513	BNC 90° Plug	110581	QMA 90° Plug
190527	BNC Inline Jack	190514	SMA Straight Plug
190506	C Straight Plug	190515	SMA 90° Plug
190507	C 90° Plug	190525	SMA Inline Jack
190504	HN Straight Plug	190508	TNC Straight Plug
190505	HN 90° Plug	190509	TNC 90° Plug
190510	N Straight Plug	190531	TNC 75° Plug
190511	N 90° Plug	190523	TNC Inline Jack
190524	N Inline Jack	190521	TNC Bulkhead Jack
190522	N Bulkhead Jack		

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