

CABLE CONSTRUCTION

1. Fluoropolymer 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, Mode-S, 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 shield 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.

Note: This product is also available with an orange fluoropolymer jacket under product number S34141.

PHYSICAL DATA

• Conductor	14 AWG Stranded SPC
• Operating Temperature	-55° to +200°C
• Outer Diameter: in (mm)	0.27 (6.86)
• Minimum Bend Radius: in (mm)	1.40 (35.56)
• Weight: lbs/100 ft (kg/100 m)	6.5 (9.7)

ELECTRICAL DATA

• Impedance: ohms	50	
• Capacitance: pF/ft (m)	25.0 (82.0)	
• Velocity of Propagation: %	80.5	
• Time Delay: ns/ft (m)	1.26 (4.13)	
• RF Shielding Effectiveness: dB/min	-90	
• DC Resistance: ohms/1000 ft (m)	2.9 (9.5)	
• Attenuation: Nom / Max	dB/100 ft	(dB/100 m)
• @400 MHz	4.2 / 4.7	(13.8 / 14.4)
• @1.0 GHz	6.7 / 7.4	(22.0 / 24.3)
• @1.6 GHz	8.6 / 9.5	(28.2 / 31.2)
• @5.0 GHz	15.5 / 17.1	(50.9 / 56.1)
• K Values (nom loss):	K1 = 0.207, K2 = 0.0001785	
• Formula for Attenuation:	$(K1 * \sqrt{F(MHz)}) + (K2 * F(MHz))$	

All values nominal unless otherwise noted

PIC P/N **CONNECTOR TYPE**

ARINC

190319	404 Size 1
190301	600 Size 1
190302	600 Modified Size 1
190303	404/600 Size 5
190329	Size 8 Socket

M39029 for MIL-C-38999 Connector

190338	Size 8 Pin
190339	Size 8 Socket

M39012

PIC P/N	CONNECTOR TYPE	PIC P/N	CONNECTOR TYPE
190312	BNC Straight Plug	190314	SMA Straight Plug
190313	BNC 90° Plug	190315	SMA 90° Plug
190327	BNC Inline Jack	190308	TNC Straight Plug
190306	C Straight Plug	190309	TNC 90° Plug
190307	C 90° Plug	190331	TNC 75° Plug
190304	HN Straight Plug	190323	TNC Inline Jack
190305	HN 90° Plug	190321	TNC Bulkhead Jack
190310	N Straight Plug		
190311	N 90° Plug		
190324	N Inline Jack		
190322	N Bulkhead Jack		

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