

CABLE CONSTRUCTION

1. FEP Teflon® 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.

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.



PHYSICAL DATA

- Conductor 10 AWG Stranded SPC
- Operating Temperature -55° to +200°C
- Outer Diameter: in (mm) 0.44 (11.05)
- Minimum Bend Radius: in (mm) 2.50 (63.50)
- Weight: lbs/100 ft (kg/100 m) 18.0 (26.8)

ELECTRICAL DATA

- Impedance: ohms 50
- Capacitance: pF/ft (m) 25.5 (83.7)
- Velocity of Propagation: % 82.5
- Time Delay: ns/ft (m) 1.23 (4.04)
- RF Shielding Effectiveness: dB/min -90
- DC Resistance: ohms/1000 ft (m) 0.8 (2.5)
- Attenuation: Nom / Max dB/100 ft (dB/100 m)
 - @400 MHz 2.2 / 2.4 (7.2 / 7.9)
 - @1.0 GHz 3.5 / 3.9 (11.5 / 12.8)
 - @1.6 GHz 4.5 / 5.0 (14.8 / 16.4)
 - @5.0 GHz 8.3 / 9.1 (27.2 / 29.9)
- K Values (nom loss): K1 = 0.105, K2 = 0.0001674
- Formula for Attenuation: $(K1 * \sqrt{F(MHz)}) + (K2 * F(MHz))$

All values nominal unless otherwise noted

PIC P/N **CONNECTOR TYPE**

ARINC

190401	600 Size 1
190402	600 Modified Size 1

M39012

PIC P/N **CONNECTOR TYPE**

190412	BNC Straight Plug
190413	BNC 90° Plug
190406	C Straight Plug
190407	C 90° Plug
190410	N Straight Plug
190411	N 90° Plug
190424	N Inline Jack
190422	N Bulkhead Jack
190408	TNC Straight Plug
190409	TNC 90° Plug
190423	TNC Inline Jack
190421	TNC Bulkhead Jack

*Die Sets Available On Loan Or For Purchase From PIC
Refer To Connector Drawing For Tooling
Call PIC For Availability*