High-temperature RF coaxial & avionics data

M17/93-00001 PFA Coax 250°C

MIL-DTL-17 M17/93-00001 50 Ω 250 °C PFA Coax Cable

RG-178B/U high-temp 250 °C 50 Ω miniature PTFE/PFA coaxial cable



MIL-DTL-17/93-00001 | 750 V · +250 °C | Fluoropolymer HT

Application

M17/93-00001 PFA Coax 250 °C features a silver-plated copper-clad steel centre conductor, solid PTFE dielectric (50 Ω), ≥ 95% silver-plated copper braid, and a translucent-tan PFA jacket for 250 °C RF interconnects.

Typical uses: Commercial & military aircraft avionics bays, Radar, electronic warfare & satellite transceivers, MIL-STD-1553B airborne multiplex data networks, High-temperature RF test benches & telemetry

Construction





Cross-section, not to scale

1	Conductor	ASTM B298 Class K stranded silver-plated annealed copper · ASTM B298 Silver Cu
2	Dielectric / core insulation	Solid extruded PTFE fluoropolymer (50 Ω) · MIL-DTL-17/93-00001
3	Metallic EMC screen	Overall ≥ 95% silver-plated copper wire braid shield · EMC ≥ 85% shield
4	Outer sheath	Translucent-tan 250 °C extruded PFA fluoropolymer outer jacket · 250 °C Continuous PFA

Technical data

Typical values

Rated voltage	750 V	**Test voltage**	1.5 kV AC
Conductor	Silver-Plated Cu	**Insulation**	Solid extruded PTFE fluoropolymer (50 Ω)
Impedance / insulation	50 Ω ± 2 Ω · ≥ 5,000 MΩ·km	**Temp. range (fixed)**	-70 °C to +250 °C
Temp. range (flexing)	-55 °C to +250 °C	**Peak / short-circuit**	+300 °C (short-term)
Min. bending radius	10 × OD (fixed)	**Flame / fire rating**	250 °C Continuous PFA
Thermal / chemical	≥ 95% Silver-Cu Braid	**Mechanical / special**	Miniature High-Temp RF
Outer finish	Translucent-tan 250 °C extruded PFA		

Sizes

4 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Impedance · Style	Outer Ø ≈ mm	Max. R20 Ω/km	Metal index kg/km	Weight ≈ kg/km	Min. bend R 10×D mm
☐ **50 Ω · 30 AWG SCCS (RG-178)**	**1.8**	**780.00**	**5**	**14**	**18**
☐ **50 Ω · 26 AWG SCCS (RG-316)**	**2.5**	**276.00**	**10**	**21**	**25**
☐ **50 Ω · 26 AWG Dual-Braid**	**2.9**	**276.00**	**15**	**28**	**29**
☐ **50 Ω · 19 AWG SCCS (RG-142)**	**4.9**	**64.00**	**32**	**66**	**49**

- Conductor DC resistance R20 at 20 °C per ASTM B298 Silver Cu.
- Minimum bending radius calculated at 10 × nominal outer diameter (OD). Custom core counts and lengths available on request.

Standards and approvals

- ✓ MIL-DTL-17/93-00001
- ✓ RG-178 / RG-316 Class
- ✓ 50 Ω ± 2 Ω Coax
- ✓ EN 10204 3.1 Factory Test Certificate
- ✓ CE, RoHS 2 (2011/65/EU) & REACH

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone
+86 185 9591 3361

Email
info@tebaoflex.com

Web
tebaoflex.com/cables/m17-93-00001-50-ohm-250c-pfa-miniature-coax-cable

Typical values for this cable type, based on MIL-DTL-17/93-00001 · RG-178 / RG-316 Class · 50 Ω ± 2 Ω Coax. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.