

PFP100A Flexible Premium Low-Loss RF Communications Cable



The PCTEL® PFP100A Cable is ideal for limited space RF environments that require easy routability while limiting the effects of attenuation. The small bend radius, lightweight design, and small form factor provide a compact and sleek package. PFP100A is the optimal choice for installers working with communications systems of any size without sacrificing substantial system gain.

PCTEL's PFP line of cable is specifically designed to optimize radio frequency communications from 30MHz up to 6GHz. PCTEL offers a complete line of bulk cable for large installation projects, premium pre-made cable assemblies, and a wide variety of connector types, including reverse polarity, are available for most PFP cable sizes.

Standard Configurations*

Part Number	Length
PFP100A-REEL-1K	1000-ft reel

*Please contact PCTEL Customer Service at (800) 323-9122 for custom reel size and Custom Cable Assemblies.

Features

- Outdoor rated: UV-stable jacket and water-resistant construction
- Drop-in replacement for RG-174 and RG-316
- High-performance, lightweight design
- Ideal for RF applications including GPS, LMR, WLAN, SCADA, PTC, etc.

SPECIFICATIONS

PFP100A CABLES

Typical Attenuation by Frequency

Frequency	Attenuation (dB/100ft)
30 MHz	3.9 dB
50 MHz	5.1 dB
150 MHz	8.9 dB
220 MHz	10.9 dB
450 MHz	15.8 dB
700 MHz	19.9 dB
800 MHz	21.4 dB
900 MHz	22.8 dB
1500 MHz	30.1 dB
2000 MHz	35.2 dB
2500 MHz	39.8 dB
5800 MHz	64.1 dB

Electrical Characteristics

Specification	Measurement
Capacitance	30.8 pF/ft
Impedance	50 Ω
Velocity	66%
DC Resistance	Inner conductor Outer conductor
	< 81 Ω /1000 ft < 9.5 Ω /1000 ft
Shielding Effectiveness	> 90 dB
Jacket Spark	2000 VAC
Cut-Off Frequency	63 GHz
Peak Power	0.6 kW

Mechanical/Environmental Specifications

Specification	Measurement
Bend Installation Radius (Min.)	6.4 mm
Bend Repeated Radius (Min.)	25.4 mm
Storage Temperature	-70°C to 85°C (-94°F to 185°F)
Installation Temperature	-40°C to +85°C (-40°F to +185°F)
Operating Temperature	-40°C to +85°C (-40°F to +185°F)

For more information
about this product
contact your sales
representative or visit
> pctel.com/cables

Construction Specifications

Cable Section	Material	Diameter
Jacket	Polyethylene	.110 in (2.79 mm)
Braid	Tin-Plated Copper	.0830 in (2.11 mm)
Outer Conductor	Aluminum Tape	.065 in (1.65 mm)
Dielectric	Foam Polyethylene	.06 in (1.52 mm)
Inner Conductor	Solid BCCS	.018 in (.46 mm)



PCTEL, Inc.

T: +1 630 372 6800 | pctel.com

Specifications subject to change without notice. PCTEL® is a registered trademarks of PCTEL, Inc. ©2025 PCTEL, Inc. All rights reserved. (September 2025)